Ichthyology Bio 4415/5415
Fall 2006
Lecture: TH 8:00 – 9:15A
Laboratory: T 2:00 - 5:00P
Room 104, Freeman Building

INSTRUCTOR: Dr. Tim Bonner
OFFICE: Room 206, Freeman Building
PHONE: 512-245-3549 or 5-2284
EMAIL: TBonner@txstate.edu (preferred method of correspondence)
OFFICE HOURS: MWF 7:30 - 9:30A. Call or email to set an appointment.

Course Description: An introduction to the morphology, taxonomy, natural history, and evolution of fishes. Field trips will be made to collect specimens, and laboratory periods will be devoted to morphological and systematic analyses.

Text: \
Hubbs, C., R. J. Edwards, and G. P. Garrett. 1991. An annotated checklist of the freshwater fishes of Texas, with keys to identification of species. Texas Journal of Science Volume 43, supplement.

Bond, C. E. 1997. Biology of Fishes. 2nd edition. Saunders College Publishing. Philadelphia.

Attendance: Regular attendance for lecture and laboratory is required and expected. Students that do not have regular attendance often fail my courses. If you miss a lecture session, it is your responsibility to obtain a copy of class notes and handouts. **My notes are not available.** Field trips are an integral part of the course, and I require students to attend at least two of them. Only University-excused absences will be accepted if you miss. Without an excused absence, you grade will drop one letter for each trip missed.

Conduct: Inappropriate classroom behaviors include activated cellular phones and pagers, demands for special treatment, frequent episodes of leaving and then returning to the class, excessive tardiness, leaving lecture early, prolong chattering, reading newspapers during class, dominating discussions, and others.

Academic Dishonesty: Cheating in any form will not be tolerated. See University Policy in undergraduate and graduate handbook.

Grading: Course grade will be based on three lecture exams (100 pts. each), three laboratory practicals (100 pts. each), and species summaries (60 pts). Total points = 660. No extra credit will be given.

A = 594 - 660
B = 528 - 593
C = 462 - 528
D = 396 - 461
F = 0 - 395

Tentative Lecture Exam Schedule:
Exam I – Oct 3
Exam II – Nov 7
Exam III (Comprehensive) –TBA

Tentative Laboratory Practical Schedule:
Practical I – September 19
Practical II – October 17
Practical III – November 28

Field Trips (Tentative schedule):
- Sept 7 – 10: Big Bend
- Sept 12: Canyon Lake Sampling. Leave at 7:00P, return late Tuesday night or early Wednesday morning.
- Oct 12 – 15 (or 5 – 8): Big Bend
- Oct 26 – 29: South Texas; Indy Creek
- Nov 10 – 12: East Texas
- Nov 16 – 19: Big Bend

Lecture Course Outline:

I. Introduction
II. History of Chordata
III. Organic Evolution
IV. Classification
V. Fish Biology
    Embryology
    Integument system
    Skeletal system
    Muscular system
    Endocrine system
    Nervous system
    Respiration and circulation
    Reproduction
    Excretory system
    Digestive system
VI. Fish taxonomy and natural history
    Class Myxini
    Class Pteraspidomorphi
    Class Cephalaspidomorphi
    Class Acanthodii
    Class Placodermii
    Class Chondrichthyes
    Class Actinopterygii
    Class Sacropterygii
VII. Fish zoogeography

Laboratory Course Outline:

Lab 1: Anatomy and key characteristics
Lab 2: Anatomy and key characteristics
Lab 3: Anatomy and key characteristics
Lab 4: Practical I
Lab 5: Class, Order, Family
Lab 6: Class, Order, Family
Lab 7: Class, Order, Family
Lab 8: Practical II
Lab 9: Texas Freshwater Fishes
Lab 10: Texas Freshwater Fishes
Lab 11: Texas Freshwater Fishes
Lab 12: Texas Freshwater Fishes
Lab 13: Texas Freshwater Fishes
Lab 14: Practical III

Other important dates:

Sep 4 – Classes do not meet
Sep 8 – Last day to drop with refund
Sep 12 – Last day to drop with a "W"
Nov 20 – Last day to drop with a “W” or “F”
Nov 22 – 26 – No classes; Thanksgiving Vacation
Dec 4 – Last day of class
TBA – Final Exam

See Withdrawal Policy in the undergraduate catalog and schedule of classes for additional information.

Students with special needs (as documented by the Office of Disability Services) should identify themselves at the beginning of the semester.