**EBIO 428/728, ICHTHYOLOGY - Tentative Lecture Schedule – Fall 2011**

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| **Date** | | **Topic** | | **Text readings** | |
| Aug 29 | | [Introduction](http://www.museum.tulane.edu/ichthyology/lectures/introduction.ppt) | |  | |
|  | | **Part I: Major groups of Fishes** | |  | |
| 31 | | [Jawless fishes](http://www.museum.tulane.edu/ichthyology/lectures/jawless_fishes.ppt) | | 19-27, 89-102 | |
| Sep 2 | | [Early gnathostomes](http://www.museum.tulane.edu/ichthyology/lectures/earlygnathostomes.ppt), [Phylogeny fossil record conflicts](http://www.museum.tulane.edu/ichthyology/lectures/Phylogeny_fossil_record_conflicts.pptx) (supporting lecture) | | 105-09, 130-31 | |
| 9 | | [Chondrichthyes](http://www.museum.tulane.edu/ichthyology/lectures/cartilaginous_fishes.ppt) | | 109-26 | |
| 14 | | [Sarcopterygians](http://www.museum.tulane.edu/ichthyology/lectures/sarcopterygians.ppt) | | 131-43 | |
| 16 | | [Early rayfins](http://www.museum.tulane.edu/ichthyology/lectures/early_rayfins.ppt) | | 147-57 | |
| 21 | | [Early teleosts](http://www.museum.tulane.edu/ichthyology/lectures/early_teleosts.ppt) | | 159-75 | |
| 26 | | [Ostariophysans](http://www.museum.tulane.edu/ichthyology/lectures/ostariophysans.ppt) | | 177-89 | |
| 30 | | [Protacanthopterygians](http://www.museum.tulane.edu/ichthyology/lectures/protacanthopterygians.ppt) | | 193-202 | |
| Oct 3 | | [Intermediate Euteleosts](http://www.museum.tulane.edu/ichthyology/lectures/intermediate_euteleosts.ppt) | | 205-26 | |
| 7 | | [Basal acanthomorphs](http://www.museum.tulane.edu/ichthyology/lectures/basal_acanthomorphs.ppt) | | 229-46 | |
| 10 | | [Percomorph acanthopterygians](http://www.museum.tulane.edu/ichthyology/lectures/percomorphs.ppt) | | 251-78 | |
| 12 | | [Mitogenomes\_and\_Euteleost\_ToL](http://www.museum.tulane.edu/ichthyology/lectures/Mitogenomes_and_Euteleost_ToL.ppt) (supporting) | |  | |
| 17 | | **Lecture Exam 1 (Major groups of fishes)** | |  | |
|  | **Part II: Form and Function** | | |  | |
| 19 | [Integumentary/Skeletal system](http://www.museum.tulane.edu/ichthyology/lectures/skeletal.ppt) [[notes](http://www.museum.tulane.edu/ichthyology/old_lectures/skeleton.html)] | | | 48-66, 283-90 | |
| 21 | [Musculature/swimming](http://www.museum.tulane.edu/ichthyology/lectures/musculature_swimming.ppt) [[notes](http://www.museum.tulane.edu/ichthyology/old_lectures/musculature.html)] | | | 311-31 | |
| 26 | [Circulation/aquatic respiration](http://www.museum.tulane.edu/ichthyology/lectures/circulation.ppt) [[notes](http://www.museum.tulane.edu/ichthyology/old_lectures/circulation.html)] | | | 441-61, 463-65 | |
| 30 | [Boyancy and air-breathing](http://www.museum.tulane.edu/ichthyology/lectures/respiration_buoyancy.ppt) [[notes](http://www.museum.tulane.edu/ichthyology/old_lectures/respiration.html)] | | | 332-38 | |
| Nov 2 | [Alimentary canal/feeding](http://www.museum.tulane.edu/ichthyology/lectures/alimentary.ppt) [[notes](http://www.museum.tulane.edu/ichthyology/old_lectures/alimentary.html)] | | | 414-35 | |
| 6 | [Excretion/osmoregulation](http://www.museum.tulane.edu/ichthyology/lectures/excretion.ppt) [[notes](http://www.museum.tulane.edu/ichthyology/old_lectures/excretion.html)] | | | 469-88 | |
| 11 | [Genital system and reproduction](http://www.museum.tulane.edu/ichthyology/lectures/reproduction.ppt) [[notes](http://www.museum.tulane.edu/ichthyology/old_lectures/reproduction.html)] | | | 517-36 | |
| 16 | [Sensory perception](http://www.museum.tulane.edu/ichthyology/lectures/sensory.ppt) [[notes](http://www.museum.tulane.edu/ichthyology/old_lectures/sensory.html)] | | | 345-80, 389-401 | |
| 18 | | | [Coloration/communication](http://www.museum.tulane.edu/ichthyology/lectures/coloration_communication.ppt) [[notes](http://www.museum.tulane.edu/ichthyology/old_lectures/communication.html)] | 291-305, 380-84 | |
| 21 | | | **Lecture Exam 2 (Form and Function)** |  | |
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|  | | | **Part III: Zoogeography** |  | |
| 28 | | | [Freshwater zoogeography](http://www.museum.tulane.edu/ichthyology/lectures/fwzoogeog.html) | 602-09 | |
| Dec 2 | | | [Marine zoogeography](http://www.museum.tulane.edu/ichthyology/lectures/mzoogeog.html) | 624-33 | |
| 7 | | | [Migrations](http://www.museum.tulane.edu/ichthyology/lectures/migrations.html) | 756-62 | |
| 17 | | | **Comprehensive Lecture Final (Saturday, 8:00 a.m.-12:00 p.m.)** |  | |
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**Lecture text: *Bond’s Biology of Fishes* 3nd Ed. M. Barton, Thompson Brooks/Cole**

**Lecture Hours: Lecture 9:00-9:50 MWF, SELab 212**

**Instructor: Hank Bart (**[**hank@museum.tulane.edu**](mailto:hank@museum.tulane.edu)**)**

**Office: 4054 Stern Hall**

**Office hours: 10-12 MF; 10-11 W, or by appointment**

**Teach Assistant: Greg Glotzbecker (**[**gglotzbe@tulane.edu**](mailto:gglotzbe@tulane.edu)**)**

**GRADING**

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| **Lecture exams (2 @ 20% ea.)** | **40%** |
| **Lab exams (1 @ 20% ea.)** | **20%** |
| **Lecture Final** | **25%** |
| **Group project** | **15%** |
| **TOTAL** | **100%** |