

474 Ichthyology Lab Syllabus: Fall 2014

Location: Hesler Biology Building 603
Time: Mon. and Wed. 10:10 am – 1:10 pm **OR** Tue. and Thu. 9:40 am – 12:25 pm
TAs: **Sam Borstein** sborstei@vols.utk.edu
Joel Corush jcorush@vols.utk.edu
Lab Grade: 4 Practicals worth 100 pts each, 400 pts total

There will be three lab Sight ID practicals (100 pts each) and one Key practical (100 pts). New fish will be introduced at the beginning of lab and time spent in the lab is very closely related to how well you do on the lab tests. Don't just pick up the jar and look, pull the fish out and hold it. Be sure to return fish to the correct jars and be sure to keep specimens moist. A few copies of the most useful books for lab (listed below) will be provided.

Schedule:

Aug. 25&26	Morphology and Nomenclature	Oct. 15&16	Fall Break No labs
Aug. 27&28	Marine & Exotic FW Families	Oct. 20&21	Cyprinidae I
Sept. 1&2	Marine & Exotic FW Families	Oct. 22&23	Cyprinidae II
Sept. 3&4	Labor Day/No class	Oct. 27&28	Catostomidae and Ictaluridae
Sept. 8&9	Marine & Exotic FW Families	Oct. 29&30	Review
Sept. 10&11	Small NA Freshwater Families	Nov. 3&4	Review
Sept. 15&16	Review	Nov. 5&6	Review
Sept. 17&18	Sight ID Practical 1	Nov. 10&11	Sight ID Practical 3
Sept. 22&23	Little River Field Trip	Nov. 12&13	Practical 4: Key Sample
Sept. 24&25	Cottidae, Centrarchidae, Moronidae	Nov. 17&18	Practical 4: Key Sample
Sept. 29&30	Percidae I	Nov. 19&20	Practical 4: Key Sample
Oct. 1&2	Percidae II	Nov. 24&25	Practical 4: Key Sample
Oct. 6&7	Review	Nov. 26&27	Thanksgiving: No Labs
Oct. 8&9	Review	Dec. 1&2	No Labs
Oct. 13&14	Sight ID Practical 2		

Books: None are required, but all are recommended

Etnier, D.A. and W.C. Starnes. 2001. *The Fishes of Tennessee*. University of Tennessee Press, Knoxville. ISBN: 0870497111. Available for free: <http://newfoundpress.utk.edu/pubs/fishes/>

Page, L.M. and B.M. Burr. 2011. *Peterson Field Guide to Freshwater Fishes*. 2nd Edition. Houghton, Mifflin, Harcourt, Boston. ISBN: 0547242064

Ray, C. and C.R. Robins. 1999. *Peterson Field Guide to Atlantic Coast Fishes: North America*. Houghton, Mifflin, Harcourt, Boston. ISBN: 0395975158

Specimens: Fish that have detailed collection labels that are on the TA's lab table are part of the David A. Etnier Ichthyological Collection at UT and are valuable scientific specimens. Never open more than two jars at a time, keep the specimens moist, and make sure to return the specimens to the correct jar. Fish in buckets with detailed labels of specimens should only be opened one at a time.

Sight ID practicals:

During lab practicals, you will largely be tested over the information on your lab handouts. If only family level information was provided for a group of specimens, only family level identification will be required. If genus or species information was given on the handout, then the ability to look at a specimen with no label

and return its genus and species on the practical will be expected. Other possible test questions will include the diagnostic character for a species, genus, or family level name that we might ask for in reference to a specimen or name. Also, questions about general fish morphology and etymology are fair game.

It is also crucial that you learn to spell the taxonomic names correctly. With few exceptions, only correct spellings will be accepted on tests. *Macropterus salmoides* and *Micropterus salmonica* will not be considered acceptable spellings of our friend *Micropterus salmoides*. If we can't read the names, they will be counted wrong on tests as well. Also, remember that if you want a re-grade, take the practicals in pen.

We realize it is difficult to know whether you know the specimens "well enough". Our suggestion is to pretend you have a pile of dead fish in a jar with no knowledge of where they came from or what they are related to initially, and you need to give a species name for every fish in that random jar. If you leave lab thinking you could do this, you are probably on track. Since this will basically be the fourth and final lab practical, if you cannot do this, you might think about spending a little more time in the lab.

Key practical:

The final practical will consist of identifying approximately 20 random fish you might encounter in a Tennessee stream that you will have to identify to species. As a tribute to Rocky Top, every fish examined in lab from Tennessee will be considered fair game.

Field Trips: There will be a day trip to Little River during lab time the 22nd and 23rd of September. Optional full-day (9 AM – 3 or 4 PM) field trip to the upper Hiwassee River on 20 or 27 (Saturdays) September.