Fishes of the Southern Appalachians
Highlands Biological Station, 2022
May 30 - June 10

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Course Syllabus

This course will focus on field identification of live fishes and dichotomous key identification of preserved fishes from the southern Appalachians. In addition to traditional collection techniques (seining and electroshocking), we will also collect data via snorkel surveys. Lectures will mostly consist of information regarding the general biology and ecology of families of Appalachian fishes and the hydrology of the region. Additionally, we will review a number of peer-reviewed publications focused on conservation, evolution, behavior, and ecology of Appalachian fishes.

Generally, time will be spent:
1. in the field collecting/observing fishes (60%)
2. driving to sites (paper discussions will occur in transit (concurrent with above))
3. in the lab learning diagnostic characters of all fish families in the Southern Appalachians (30%)
4. in lecture (10%)

The final grade will be based on field notebooks (30%), field quizzes (30%), article reviews (10%), and a final exam (30%).

Required Supplies:
Wet suit, mask & snorkel- It is highly recommended that you rent/purchase a full wetsuit (long sleeves and long legs). These mountain streams are quite cold, even in the middle of summer.
Field Notebook (yellow write in rain small notebook works well)
Texts: Peterson Field Guide to Freshwater Fishes, 2nd ed. Page & Burr, 2011
Field clothes: All students will participate in collection and observation of fishes on field trips. Expect to get wet, and probably pretty dirty. You will be responsible for your meals in the field as well as hydration. Some important supplies are: wading shoes (not sandals – lots of rocks in these streams), clothes that can get dirty, hats, sunscreen, etc. On days we shock, HBS will provide waders.

Optional Supplies:
Photography is encouraged! Underwater cameras would be great to bring on field trips.
Jeweler's loops can come in handy during field identification.

Contact Information:
Email: geheber@ucmo.edu

Tentative Schedule –

Unless otherwise stated, students will have access to lab space to work on identification of fishes. It is expected that students will utilize non-scheduled times to work on identification skills, reading and understanding review articles, and conducting independent field observations.

May 30 Monday	9:00AM- Lecture and Course Introduction 1:00PM- Lab Getting to know fish; Dichotomous Key
May 31 Tuesday	Clear Creek (seine) Chattooga (snorkel)
June 1 Wednesday	Lecture and Lab day
June 2 Thursday	Field trip (site TBD)* **Paper discussion #1** (seine and electroshock)
June 3 Friday	Field trip (site TBD)* **Field Quiz 1**
June 4 Saturday	Field trip (site TBD)* Lecture
June 5 Sunday	Open Day
June 6 Monday	Field trip (site TBD)* **Paper discussion #2**
June 7 Tuesday	Field trip (site TBD)* **Field Quiz 2**
June 8 Wednesday	Lecture and Lab day
June 9 Thursday	Field trip (site TBD)* **Paper discussion #3**
June 10 Friday	**Final Field Quiz** **Final Exam**
June 11 Saturday	Clean Up day

Dates and sites of field trips are subject to change due to weather.

*The main streams of focus for the course are: Bent Creek, Clear Creek, Davidson River, Mill Creek, Horsepasture River, Chattooga, Cullasaja River, South Fork Mills River, Hiwassee River, and Little Tennessee River. Additionally, it is possible that we may visit other tributaries to Catawba, Broad, French Broad, Pee Dee, and Little Tennessee Rivers for the course (depending on course need).