## Course Syllabus

## **Environmental Biology of Fishes**

(FISH/WILD/MARS/ECOL 4300/6300)

## **Spring 2021**



**Instructors** 

Dr. Adam Fox agfox@uga.edu

Email is the best way to reach me. If you urgently need to reach me, you may call or text my personal cell phone at (706) 389-4066. Zoom office hours: T/TH 11AM-12PM or by

appointment.

Dr. Peter Hazelton phaze@uga.edu

Email, or Microsoft Teams Messenger is the best way to get in touch with me. I will respond as soon as I am able. You may also reach me via call or text at 706-352-9378.

Zoom office hours: Wednesday Noon-2 PM or by appointment.

Mr. Mark D'Ercole <u>mark.dercole@uga.edu</u>, Teaching assistant. <u>Zoom office hours</u>: Friday 1:20-

4PM, or by appointment.

Mr. Michael Baker michael.baker2@uga.edu, Teaching assistant. . Zoom office hours: by

Appointment.

#### **Class Time and Location**

MWF 11:30-12:20. Physical location: Warnell 1-306.

Virtual location: Zoom link for EBF Lecture, Lab, and Virtual Office Hours

This semester, much of the class will be shifted to a synchronous online format, due to classroom capacity limits resulting from the Coronavirus Pandemic. Please see the section below detailing how EBF will work in Spring 2021.

#### **Course Description**

This course presents an introductory study of the biology, ecology, and taxonomy of fishes. In particular, the course emphasizes the evolution and diversity of fishes, including their morphology, development, life history, behavior, and ecology. The course will include lectures on fishes from throughout the world; however, we will emphasize fishes of North America and especially species that are commonly found in Georgia.

#### **Course Objectives and Learning Outcomes**

Upon completion of this course, the student will be able to:

- 1) Understand the basic biology and ecology of fresh and saltwater fishes
- 2) Understand the classification of major taxonomic groups of fishes
- 3) Understand and discuss issues related to fish habitat and conservation
- 4) Be able to evaluate quality of various sources of information
- 5) Develop skills in critical thinking, writing, and oral expression

#### **EBF** Lab

FISH/WILD/MARS/ECOL 4300/6300L is a separate course and is required only for undergraduate aquatic science majors (and dual emphasis with aquatic science).

#### **Required Textbooks and Reference Materials**

- Moyle, P.B. and J.J Cech, Jr. 1996. <u>Fishes: an introduction to ichthyology.</u>
   5<sup>th</sup> Edition. Prentice-Hall, Engelwood Cliffs, NJ. 612 pp.
   Used copies are available on Amazon for <\$30</li>
- Additional lecture materials may be made available via <u>eLearning Commons</u> and/or provided in class.

#### **How EBF Online Will Work:**

During the Spring 2021 semester, due to the Coronavirus Pandemic, much of EBF lecture will take place synchronously, via Zoom.

- Lectures will be held on Zoom during the normal class time. Students are expected to attend. A recording of each lecture, along with other supplementary information, will be uploaded to eLC. Links to each lesson's materials will be provided in the form of an eLC announcement.
  - o On many Fridays, we will hold interactive activities on Zoom. It may not be possible to record some of these activities.
  - o It can feel difficult for students to actively participate in an online class. Please feel free to ask questions during class instructors will try to monitor the Zoom chat, as well as keep an eye out for "hand-raise" emojis (

Quizzes and Exams: All tests will be completed on eLC, and will feature a combination of T/F, multiple choice, fill in the blank, matching, short answer, and essay questions. Because of the nature of online testing, you should expect questions that require you to demonstrate your understanding of the material as concepts rather than just memorization of facts. Exams will be comprehensive, and will have time limits. All exams and quizzes are open book: you may use your class notes, materials provided by the instructor, textbooks or primary literature, or online references. You may not seek assistance on an exam or quiz from any person – no classmates, friends, family, other professors, librarians, famous ichthyologists, etc. In the case of conflicting sources of information, preference will be given to what we discussed in class. You are responsible for completing online tests by the deadline.

- Weekly Quizzes will open on eLC at noon each Sunday and will be due at 11:30AM on Monday (at the start of class). You will have 15 min to complete each exam (with a 5-minute grace period to finish up your answers).
- The 3 Exams will be held via eLC during normal class time (11:30AM-12:20PM) on the date listed in the schedule below. At the end of that time, you will have a 5-minute grace period to finish up your answers. Although each exam will focus mainly on the material since the previous exam, they are comprehensive. Any changes to exam dates, structure, etc. will be announced well in advance.
- The Final Exam will also be held via eLC during the scheduled final exam period for this class. The final is optional, and your grade on it will replace your lowest exam score.

**Fish Presentations:** Students will create group presentations about the biology and ecology of a fish species. Additional guidance will be provided in a separate handout. Graduate students enrolled in this class (6300) will present a similar lecture, which will be held to a higher standard. As part of the presentation project, students will be expected to submit several rough drafts of their presentation.

# <u>Grading</u> Assignments will be weighted as follows:

Lecture	4300	6300
Quizzes (11)	110pts	110pts
Exams (3)	300pts	300pts
Optional Final Exam	-	-
(will replace lowest exam score)	100pts	100pts
Fish Presentation	80pts	80pts
Assignments	20pts	20pts
Professionalism & Participation	10pts	10pts
Total	620	620

• Enthusiasm, attitude, and contributions to our class discussions and activities matter.

• Penalties will be assessed for late assignments

Grading scale for all students:

	0		
Letter	Percent Required		
Grade			
A	93-100		
<b>A-</b>	90-92.9		
<b>B</b> +	87-89.9		
В	83-86.9		
<b>B-</b>	80-82.9		
C+	77-79.9		
C	73-76.9		
<b>C-</b>	70-72.9		
D	60-69.9		
F	< 60		

#### **Expectations**

To receive the greatest benefit from this course, students are expected to:

- Demonstrate integrity
- Be engaged and take notes
- Be prepared for class
- Participate in class/group discussions
- Attend all scheduled synchronous lectures (and labs if applicable)
- Complete and submit assignments on time
- Be responsible for your learning

Expectations of in-class behavior:

- Be respectful of the instructors and fellow students
- Ask questions!
- Participate in Zoom classes as though you were in-person.
- Avoid the use of distracting electronic devices.
- Any inappropriate or behavior may result in the student(s) being removed from the class and/or loss of points.

#### As instructors, we commit to:

- Come prepared to class.
- Make efficient use of class time.
- Challenge students while being respectful.
- Respond promptly (24 hrs) to student questions and concerns.
- Grade fairly and consistently.
- Communicate via eLC or email.

<u>University Honor Code & Academic Honesty:</u> As a University of Georgia student, you have agreed to abide by the UGA academic honesty policy. UGA Student Honor code: "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others". A Culture of Honesty, the University's policy and procedures for handling cases of suspected dishonesty, can be found at <a href="https://honesty.uga.edu/">https://honesty.uga.edu/</a>

You are responsible for informing yourself about the university's standards before performing any academic work. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Please ask if you have questions related to course assignments and the academic honesty policy. Any form of possible academic dishonesty will be reported to the UGA Office of the Vice President for Instruction.

Accommodations for Disabilities: If you require a disability-required accommodation, it is essential that you register with the Disability Resource Center (Clark Howell Hall; <a href="https://drc.uga.edu">https://drc.uga.edu</a>; 706-542-8719 [voice]; 706-542-8778 [TTY]) and notify your instructor(s) of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations. Please note that accommodations cannot be provided retroactively.

Students with documented disabilities who require reasonable accommodations in order to participate in course activities or meet course requirements should contact the instructor(s) within the first week of the semester so that suitable arrangements can be made through the Disability Resource Center.

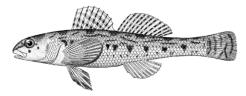
Mental Health and Wellness Resources: If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit https://sco.uga.edu. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services. UGA has several resources for a student seeking mental health services:

- (<a href="https://www.uhs.uga.edu/bewelluga/bewelluga">https://www.uhs.uga.edu/bewelluga/bewelluga</a>) or crisis support (<a href="https://www.uhs.uga.edu/info/emergencies">https://www.uhs.uga.edu/info/emergencies</a>).
- If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA (<a href="https://www.uhs.uga.edu/bewelluga/bewelluga">https://www.uhs.uga.edu/bewelluga/bewelluga</a>) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center.
- Additional resources can be accessed through the UGA App.

**FERPA Notice:** The Federal Family Educational Rights and Privacy Act (FERPA) grants students certain information privacy rights. To comply with FERPA, all communication that refers to individual students must be through a secure medium (UGAMail or eLC) or in person. Instructors are not allowed to respond to messages that refer to individual students or student progress in the course through non-UGA accounts, phone calls, or other types of electronic media. For details, please visit <a href="https://apps.reg.uga.edu/FERPA">https://apps.reg.uga.edu/FERPA</a>.

<u>Legal:</u> The course syllabus is a general plan for the course; deviations announced to the class by the instructors may be necessary.

House Bill 280: 'Campus Carry' University System of Georgia Guidelines: http://www.usg.edu/hb280



#### **Additional Coronavirus Information for Students**

#### • DawgCheck:

 Please perform a quick symptom check each weekday on DawgCheck—on the UGA app or website—whether you feel sick or not. It will help health providers monitor the health situation on campus: <a href="https://dawgcheck.uga.edu/">https://dawgcheck.uga.edu/</a>

#### • What do I do if I have symptoms?

O Students showing symptoms should self-isolate and schedule an appointment with the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m.-5 p.m.). Please DO NOT walk-in. For emergencies and after-hours care, see https://www.uhs.uga.edu/info/emergencies.

#### • What do I do if I am notified that I have been exposed?

Students who learn they have been directly exposed to COVID-19 but are not showing symptoms should self-quarantine for 14 days consistent with Department of Public Health (DPH) and Centers for Disease Control and Prevention (CDC) guidelines. Please correspond with your instructor via email, with a cc: to Student Care & Outreach at sco@uga.edu, to coordinate continuing your coursework while self-quarantined. If you develop symptoms, you should contact the University Health Center to make an appointment to be tested. You should continue to monitor your symptoms daily on DawgCheck.

#### • How do I get a test?

- Students who are demonstrating symptoms of COVID-19 should call the University Health Center.
   UHC is offering testing by appointment for students; appointments may be booked by calling 706-542-1162.
- UGA will also be recruiting asymptomatic students to participate in surveillance tests. Students living in residence halls, Greek housing and off-campus apartment complexes are encouraged to participate.

#### • What do I do if I test positive?

Any student with a positive COVID-19 test is required to report the test in DawgCheck and should self-isolate immediately. Students should not attend classes in-person until the isolation period is completed. Once you report the positive test through DawgCheck, UGA Student Care and Outreach will follow up with you.

# Class Schedule<sup>1</sup>

Month	Date	Day	Topic	What's Due Today?
January	13	W	Course Introduction	·
	15	F	Form & Function	
	18	M	MLK Day: No Class	
	20	W	No Class: Georgia AFS	
	22	F	Form & Function	
	25	M	Form & Function	Quiz 1 (11:30AM); GA AFS Assignment
	27	W	Systematics	
	29	F	Systematics	
February	1	M	Catch-up	Quiz 2 (11:30AM)
•	3	W	Respiration & Circulation	
	5	F	Respiration & Circulation	
	8	M	Locomotion	Quiz 3 (11:30AM)
	10	W	Locomotion & Buoyancy	
	12	F	Catch-up & Exam Review	
	15	M	Exam 1	Exam 1 (12:30)
	17	W	Instructional Break: No Class	
	19	F	Active Learning	
	22	M	Thermoregulation	Quiz 4 (11:30AM)
	24	W	Osmoregulation	
	26	F	Senses	
March	1	M	Senses & Catch-up	Quiz 5 (11:30AM)
	3	W	Reproduction	
	5	F	Breeding behavior	
	8	M	Breeding behavior	Quiz 6 (11:30AM)
	10	W	Development	
	12	F	Instructional Break: No Class	
	15	M	Signals & Communication	Quiz 7 (11:30AM)
	17	W	Signals & Communication	Presentation Outline (11:30AM)
	19	F	Catch-up & Exam Review	
	22	M	Exam 2	Exam 2 (12:30)
	24	W	Nutrition & Feeding	
	26	F	Foraging Ecology	
	29	M	Invertebrate "Fish"	Quiz 8 (11:30AM)
	31	W	Introduction to Ecology	
April	2	F	Introduction to Ecology & Catch-up	Presentation Rough Draft (11:30AM)
	5	M	Temperate Streams	Quiz 9 (11:30AM)
	7	W	Temperate Lakes & Reservoirs	
	9	F	Tropical Freshwater Environments	
	12	M	Estuaries	Quiz 10 (11:30AM)
	14	W	Coastal Habitats	
	16	F	Catch-up	Recorded Presentation (11:59PM)

	19	M	Tropical Reefs	Quiz 11 (11:30AM)
	21	W	Epipelagic Zone	
	23	F	Deep Sea	
	26	M	Polar Regions	Quiz 12 (11:30AM)
	28	W	Conservation	Presentation Peer Review (11:30AM)
	30	F	Catch-up & Exam Review	
May	3	M	Exam 3	Exam 3 (12:30)
	7	F	Final Exam: 12:00-3:00PM	Final Exam (3:00PM)

<sup>&</sup>lt;sup>1</sup> Schedule is tentative and subject to change. Changes will be announced on eLC and via email.