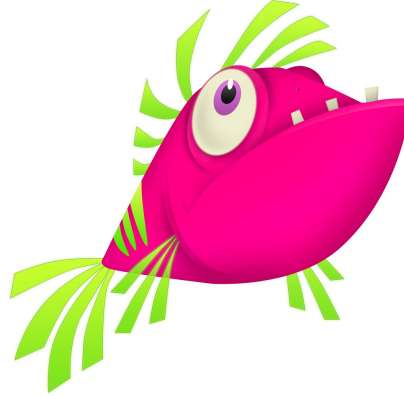


Fish Diversity & Conservation

WATS3100

Fall Semester, 2015
WATS 3100- 3 credit hours
Time: Tuesday/Thursday 10:30-11:45 AM,
BNR314



Instruction:
Phaedra Budy
NR 108(110C), phaedra.budy@usu.edu,
435-797-7564
Office hours: *by appointment*

Jereme Gaeta
BNR 175, jereme.gaeta@usu.edu,
435-797-2498
Office hours: *by appointment*

Teaching Assistant: lab and grading: Colton Finch
NR 327, colton@aggiemail.usu.edu
Office hours: *by appointment*

Writing Fellows: writing assignments
StephanieLofgreen stephanielynlofgreen@gmail.com
Mariah Andreasen andreasen553@gmail.com

Undergraduate Teaching Fellow
Levi Simmons levi.simmons@aggiemail.usu.edu

Reading: Readings will come primarily from the required Helfman text in addition to some external readings and other sources (e.g., podcast), available on Canvas and course reserves. Required text (available at USU bookstore): *The Diversity of Fishes by Helfman et al. 2009, 2nd Edition.*

Course objectives and learning outcomes:

1. Gain factual knowledge about the biology, evolutionary history, and diverse adaptations of fishes.
 - a. Students will be familiar with physiological and behavioral adaptations of fishes that allow them to feed, reproduce, and survive in diverse environments.
 - b. Students will be familiar with the natural selection and evolutionary history of fishes, and be able to classify distinct groups of fishes based on physical traits.
2. Learn fundamental principles and theories about ecology and conservation, using examples of fishes and their aquatic habitats.
 - a. Students will be familiar with ecological concepts such as species interactions, life-

- history strategies, and the influence of environmental drivers.
- b. Students will gain an appreciation for the functional role of fishes.
- 3. Develop skills in writing and public presentation (Comm. Int. class).
 - a. Students will be able to present information and informed opinions in general and to the public in a concise and informative manner.

Writing Fellows: We have two writing fellows (WFs) working with this class. This is an amazing opportunity for you to improve your writing skills and obtain higher grades on writing assignments. These WF's are undergraduates with excellent writing skills and who have received additional training in teaching English skills. Your submission to the WF should be a final product, NOT a rough draft. Your writing assignments are due to the WF's on the due dates shown on the syllabus. After a WF has reviewed your assignment, you will meet the WF to discuss his/her suggestions, and you will then have the opportunity to revise your assignment. **YOU MUST TURN IN BOTH THE WF DRAFT AND YOUR FINAL FOR FULL CREDIT.** WF reviews and meetings are mandatory, and will be reflected in your grade. If you miss your appointment with your WF, it is your problem to fix.

Writing Assignments: Each paper must be double-spaced, 1" margins, size 12 font; points will be taken off for incorrect format. Poster (Writing Assignment #3) formats provided separately.

- 1) **Elevator Speech based on "Sharkwater" Video, class and book materials about sharks (10% of grade):** In natural resource management, an elevator speech is an overview of an issue that can be delivered in the time span of an elevator ride, and is concise, yet compelling enough to influence a decision maker. Write a 2 page, double-spaced **FACTUAL** elevator speech that describes the issues outlined in the video Sharkwater, draws on your lecture notes and text, and in the end, convinces the decision maker you are "riding the elevator with" to make the decision you want. Your "decision" should be explicitly outlined in your paper (i.e., you must clearly state what action you want the decision maker to take). **Your essay should be written as a letter ... to the person, i.e., "Dear Mr. Obama..."** On the second page of your paper, in a separate paragraph, describe and justify your selected decision maker, and why you chose this person (1 paragraph). Note, this must be a real decision maker (I will check!) and will require research! 5 points extra credit: Alter your elevator speech into letter form and actually send it to your decision maker (and turn in a copy of the letter). See *Class Schedule* for assignment due dates.
- 2) **"Rising from the Shadows" Video – Response and Comparison Article.** The goal of this exercise is for you to learn how to think critically about why something has occurred, to be able articulate your ideas, and to start drawing from different sources of information. **Using the study guide questions provided AND what you have learned in class AND from your text about conservation and salmonids and any other source you chose,** formulate a 3 page essay that addresses the over-arching topic of "Why is this a success story?". You will contrast this success story with one published (in the peer reviewed literature) example of a situation in which we have failed to conserve a fish. We will give you a list of likely journals to search. Your essay should start with a brief synopsis of the video: **briefly** summarize what transpired and their primary findings (~1 paragraph) and then the same for the article (~1 paragraph). Then using a compare and contrast model,

describe why one is a success and the other is not. You must use and cite (AMA; <http://libguides.usu.edu/citations>) all sources. See *Class Schedule* for assignment due dates.

- 3) Information and Education Poster (15% of grade).** The goal of this exercise is to learn how to research a topic, glean the most important components, and present the information in a concise, educationally written and visual format. Working in groups, you will prepare an informative and educational poster with pictures and/or diagrams to explain your topic (TBA). Choose one unique topic per group, first come first serve (we will have a sign-up sheet). After reading and viewing your poster, a layman should be able to say they have a basic understanding of the most fundamental aspects of your topic. I will assign groups and provide topics and poster examples about three weeks prior to the due date. Posters will be printed and hung in the NR atrium, and we will have an advertised poster session visited by other NR students and professors in the college. Each group will present their poster at the session and be on hand to answer questions. Posters will be judged by a panel of fisheries graduate students, and the authors of the best poster will win an academic prize. Posters must be prepared in MS Office Power Point with final dimensions 30" x 20" (choose these dimensions in page setup) and may be either landscape or portrait. Your final draft of your poster must be turned in electronically (thumb drive, DVD or USU - BFT) so I can print them. Draft 1 should be submitted in print form in a small but legible size (8.5x 14 will work). You must use and cite (AMA; <http://libguides.usu.edu/citations>) multiple sources. See *Class Schedule* for assignment due dates.

Accommodation for Disabilities:

This university is required by law to help disabled students participate fully in all programs, activities and services. If you have a disability that requires note-takers, interpreters for the deaf, require extended testing time, or face other issues related to a disability, tell me or contact the Disability Resource Center (DRC) directly, Room 101 of the University Inn (797-2444 PH, <http://www.usu.edu/drc/>). Course material can be provided in alternative formats such as large print, audio, diskette, or Braille in cooperation with the DRC. All disabilities must be documented by the DRC.

Plagiarism

Plagiarism includes knowingly "representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials." The penalties for plagiarism are severe. They include warning or reprimand, grade adjustment, probation, suspension, expulsion, withholding of transcripts, denial or revocation of degrees, and referral to psychological counseling.

<http://www.usu.edu/studentervices/pdf/StudentCode.pdf>

Assignment	Number	Points	% of Total
Writing	1	16	8%
	2	16	8%
	3	30	15%
Exams	1	35	18%
	2	55	28%
Class Exercises	i	7	4%
	ii	7	4%
	iii	7	4%
	iv	7	4%
	v	6	3%
	vi	6	3%
Participation & Enthusiasm		8	4%
	sum	200	100%

Scoring (as a percentage of total course points)

- A 100-93%
- A- 92-90%
- B+ 89-87%
- B 86-83%
- B- 82-80%
- C+ 79-77%
- C 76-73%
- C- 72-70%
- D 69-60%
- F 59% and below

Extra credit (TBA) may be used to further determine borderline grades (+/-).