BIOL 104X, Summer 2021
Natural History of Alaska

Meets	Lecture MW 9:00 – 10:50 Virtual Labs: Thurs 12:30 – 4:30 Virtual/Murie/Outside
Instructor	Andy Baltensperger Email: abaltens@alaska.edu Phone: 907-347-0175 Office hours: I have an "open-door" policy and check email regularly
Prerequisites	English 111 and high school reading proficiency
Text	**Interior & Northern Alaska: A natural history** by R.L. Smith Book Publishers Network, 2008
Websites	Check Blackboard for announcements and to obtain copies of handouts and assignments. Grades will also be posted on Blackboard. When you enrolled in the course, you were automatically registered on the course website.
Description	Survey of the physical and biological environment of the Alaska, including terrestrial and aquatic systems. Topics include the origins of current geographic states, the past, present, and future climates of Alaska, life histories of common plants and animals, adaptations of organisms to the northern environment, human influences on ecosystems, and the conservation and management of wildlife and ecosystems.
Objectives	Upon successful completion of the course, students will have an understanding of the diversity and adaptations of plants and animals in Alaska, as well as an appreciation of major ecological and biogeographic processes Alaska. Lab exercises will provide hand-on experience examining topics covered in lecture and reading.
Lectures/ Discussions	This is a lecture course with a lab. Lectures will involve a mix of presentations, examples, activities, guest speakers, and extensive discussions/question-answer exchanges. Discussions require active participation and may involve brief discussions among students to address current topics and brief presentations to the class.
Labs	Labs will consist of exercises in Murie, independent activities outside, and virtual simulations conducted from home. Labs are designed to illustrate and supplement lecture material and to introduce students to a variety of environments, organisms, tools, and scientific approaches. Please inform me if you cannot participate in outdoor activities. Make sure you dress appropriately when you go outdoors. All lab assessments will be weighted equally. Laboratory assessments include question sets and laboratory reports.

Learning Outcomes

Upon successful completion of the course students will be able to:

i. Describe eco-geographic regions of Alaska and the major environmental gradients in temperature and precipitation, and how meteorological, geological and biological forces have shaped Alaska's ecosystems.
ii. Describe life history characteristics pertaining to morphology, physiology, and behavior of common plants and animals in Alaska, and provide ecological and evolutionary explanations for these characteristics.
iii. Explain how different ecological conditions controlled by climate, geography, flora, and fauna have shaped the major patterns of cultural diversity across Alaska.
iv. Explain the processes of scientific observations and investigation, and the role they play in our knowledge of the environment

Attendance

Active class attendance is expected and regular participation is required. In lectures I provide a lot of material beyond what is covered in the textbook. Quizes will be used periodically to evaluate attendance, preparedness and reading comprehension. Your participation in discussions will enhance the educational experience for both yourself and your class mates. Do not skip class. The lecture hour also provides an opportunity for announcements about upcoming labs.

Assessment

Quizes	15 %
Discussions	15 %
Exam #1	15 %
Exam #2	15 %
Exam #3	15 %
Labs	25 %

Grading

Grades will be assigned based on the percentage of points you earn in class. Grades will not be assigned on a curve. No extra credit assignments are available.

Grade	% of Total Points
A	90 – 100
B	80 – 89
C	70 – 79
D	60 – 69
F	0 – 59

Exams

Exams emphasize reasoning, problem-solving, and clarity of expression. The format will include fill-in blanks, matching, short-answer, and essays. There will be no multiple choice or True/False questions.

Missing exams

If you need to miss an exam for a scheduled activity (e.g. sports event), you must schedule a makeup at least one week before the exam. If you are ill on the day of the exam, you must: a) contact the instructor by email or phone before the exam begins, b) take a makeup exam within 48 hours, or c) bring a note from a medical professional explaining your absence.

Academic Dishonesty Acts of academic dishonesty include cheating on exams, helping others to cheat, plagiarizing, feigning illness to obtain an extension, and turning in work that was written for another class without permission. Please read the UAF Student Code of Conduct in the UAF Catalog. Students who behave dishonestly will receive an F for the class and the case will be presented to the University Disciplinary and Honor Code Committee for review. Students are encouraged to work groups on lab exercises, but unless otherwise specified, each student must turn in his or her own written assignment.

Student protections: UAF embraces and grows a culture of respect, diversity, inclusion, and caring. Students at this university are protected against sexual harassment and discrimination (Title IX). Faculty members are designated as responsible employees which means they are required to report sexual misconduct.

Disabilities Students with disabilities are encouraged to inform the instructor in the first 2 weeks of class so accommodations can be made. Please do not wait until after an exam to make me aware of the issue. If you suspect that you qualify for assistance, contact UAF's Center for Health & Counseling (474-7043). If you do not have a documented learning disability but feel that time pressure or cramped quarters has a negative effect on your exam performance, please discuss this with the instructor.

COVID-19 statement: Students should keep up-to-date on the university's policies, practices, and mandates related to COVID-19 by regularly checking this website: https://sites.google.com/alaska.edu/coronavirus/uaf/uaf-students?authuser=0 Further, students are expected to adhere to the university's policies, practices, and mandates and are subject to disciplinary actions if they do not comply.

How to get help

My primary role in this course is to help you understand biology; I want to help you. I will not know if you are having difficulties with the course material unless you tell me. I would love to see everyone do well in the course. Ultimately, however, how well you do in the class is up to you. If you have questions or are finding that you are struggling with a particular topic, assignment or question, please ask. There are several ways to get help in this course:

- If you have a question during lecture, please ask. Jump in, raise your hand, or type a question in the chat window. If one person is confused or have a question, usually many other students are too. This also helps inspire discussions.
- Talk to me after lecture or during office hours, or make an appointment.
- Talk to your TA.
- Talk to your classmates. Setting up study groups and explaining things to each other can be very helpful.
- Email me. I'm happy to answer your questions in a timely manner.

Tips for success in Biology 104X

Think through the material during class.

Take notes during class and review and edit your notes after class. Ask questions when you have them.

When you study, make your own study guide from your notes and use that to test yourself on the material. Make the effort to understand and assimilate the material as opposed to simply memorizing it.

Keep up with Readings. Plan enough time into your schedule to do a good job on the labs and homework and to do the reading and study.

Study regularly. Study a little every day before lectures and labs. It will be easier to just keep up than to get caught up.

Pay attention to the lab material. Ask questions. Get clarification before you start.
Work hard on the written assignments for lab. Get help from your TA when you have questions.

Don't be afraid to ask questions! The instructor will help you.
Be engaged in the subject matter. Challenge yourself.

Think about how biology affects your life and the world around you every day. This should be exciting and challenging.

Date	Day	#	Topic	Readings Due
17-May	M	1	Introduction/Alaska as Place	
18-May	T		No Lab	
19-May	W	2	Volcanology and Geology	
24-May	M	3	Ice and Water	
25-May	T	Lab 1	*Origins of Place*	
26-May	W	4	Beringia and the Pleistocene	
31-May	M		No Class - Memorial Day	
1-Jun	T	Lab 2	*Google Earth Map Exercises*	
2-Jun	W	5	Geography	
7-Jun	M	6	Climate and Energy Flow	
8-Jun	T	Lab 3	*Habitats*	
9-Jun	W		**Exam 1**	
14-Jun	M	7	Biomes, Ecoregions & Habitats	
15-Jun	T	Lab 4	*Macrobotany using iNaturalist*	
16-Jun	W	8	Soils, Fungi, and Lichens	
21-Jun	M	9	Trees and Shrubs	
22-Jun	T		No Lab	
23-Jun	W	10	Birds	
28-Jun	M	11	Small Mammals	
29-Jun	T	Lab 5	*Common Birds*	
30-Jun	W	12	Ungulates	
5-Jul	M	13	No Class - Independence Day	
6-Jul	T	Lab 6	*Common Mammals*	
7-Jul	W		**Exam 2**	
12-Jul	M	14	Carnivores	
13-Jul	T	Lab 7	*Scats & Tracks*	
14-Jul	W	15	Marine Mammals	
19-Jul	M	16	Fish	
20-Jul	T	Lab 8	*Virtual fish dissection*	
21-Jul	W	17	Amphibians	
26-Jul	M	18	Thermoregulation	
27-Jul	T	Lab 9	*Migration & Hibernation*	
28-Jul	W	19	Human Cultures	
2-Aug	M	20	Conservation Issues	
3-Aug	T	Lab 10	*Field Trip*	
4-Aug	W		**Exam 3**	