

# **NRM F375 Natural Resource Ecology**

Spring 2018

3 Credits

**Instructor:**

Norman R. Harris  
UAF Matanuska Experiment Farm  
1509 South Georgeson Drive  
Palmer, AK 99645

**Contact Information**

## Student Learning Outcomes:

Students will be able to:

- 1) Recognize the complexity of the biotic and abiotic interactions that influence an organism.
- 2) Demonstrate a fundamental comprehension of ecological principles by citing examples from nature.
- 3) Apply a conceptual framework to solve problems in ecology and make informed management decisions.
- 4) Determine the ecological basis for regional and global environmental issues.
- 5) Critically analyze ecological manuscripts and create a synthesis paper relating the ecological functioning of a landscape.

## Class Format:

This class consists of 41 sessions of 1 hour each. These sessions are a combination of instructor lectures and student-led discussions. The class is offered at both the Fairbanks campus and the Matanuska Experiment Farm in Palmer via a real-time video link with the instructor occasionally switching to teach from both ends. Most classes will be taught from Palmer. This is pushing the technology to its maximum and there may (will?) be trying and frustrating periods involved, so please be patient. Four short, written assignments requiring students to extrapolate ecological aspects of two Alaskan landscapes based on geographic environmental conditions will be given during the term. These will be due approximately two weeks after they are assigned. quizzes (10 points each) will also be given, unannounced, during the term. Two 1-hour exams (100 points each) will be given

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**AN INSTRUCTOR WITH AN INFLATED EGO IS AN EASY GRADER!!!**

Grading Scale:	Percentage (rounded to nearest integer)
A	100 90
B	89 80
C	79 70
D	69 60
F	<60
I	Incomplete; missing tests and/or final exam

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## **Disabilities Services**

The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials. I will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.  
<http://uaf.edu/disability/>

## **Effective communication**

Students who have difficulties with oral presentations and/or writing are strongly

(Phone 907-474-  
Writing Center (Phone 907-474-5314, location Gruening 8th floor).

## **Research Help**

Contact the Elmer E. Rasmuson Library at UAF reference desk for help with research.  
<http://library.uaf.edu> or 907-474-7481

## **UAF Help Desk**

Go to <http://www.alaska.edu/oit/> to see about current network outages and news. Reach the Help Desk at: e-mail at [helpdesk@alaska.edu](mailto:helpdesk@alaska.edu) or phone: 450.8300 (in the Fairbanks area) or 1.800.478.8226 (outside of Fairbanks)

## **Title IX**

See <http://www.uaf.edu/oeo/civil-rights/aa->

## Session Schedule and Content

NRM F375 Natural Resource Ecology

11:45 am 12:45 pm MWF, Room 183 AHRB (Fairbanks) and Mess Hall (Palmer)

Lecture	Date	Topic	Readings/Assign
1	Jan. 17	The Evolutionary Backdrop	Chapter 1
2	Jan. 19	Communities Match Environment	
3	Jan. 22	Conditions Ecological Niches	Chapter 2 Assign. 1 (20 pts)
4	Jan. 24	Conditions Physical Forces	
5	Jan. 26	Resources Obtaining Energy	Chapter 3
6	Jan. 29	Resources Keeping Your Energy	
7	Jan. 31	Life and Death	Chapter 4
8	Feb. 2	Life Strategies	Assign. 1 Due
9	Feb. 5	Intraspecific Competition	Chapter 5
10	Feb. 7	Dispersal	
11	Feb. 9	Dormancy	Chapter 6
12	Feb. 12	Game Theory	Assign. 2 (40 pts)
13	Feb. 14	Ecological Applications Single-species Populations	Chapter 7
14	Feb. 16	Exam 1	
15	Feb. 19	Interspecific Competition	Chapter 8