

Course Syllabus

Aquatic Ecology

Course number: 11:216:334

3 cr.

Instructors: Dr. Marci Meixler (meixler@sebs.rutgers.edu)

Online

Description

Aquatic Ecology is the study of inland waters including lakes, wetlands, rivers and streams. Foundational concepts covered will include how waterbodies form, organisms that live in aquatic environments, and implications of policy and conservation decisions on water quality and quantity.

Learning Goals

The learning goals in this course are to:

- Express understanding of the physical, chemical, biological, geographical and geological factors of freshwaters and how these affect the distribution of organisms.
- Understand water resource issues on local, regional and global levels.
- Explain basic population, community ecology, and ecosystem-level concepts.

Textbook (recommended)

Introduction to Limnology by Stanley I. Dodson. 2004. McGraw Hill. ISBN-13: 978-0072879353; ISBN-10: 0072879351

Academic Integrity Policy

Academic Integrity. You are responsible for understanding the [RU Academic Integrity Policy](#). I will strongly enforce this Policy and pursue all violations. For all examinations and assignments, you will be required to uphold the RU Honor Pledge, which states, "On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment." For all written assignments, we will screen your work through an automated plagiarism detection service that compares your work against a large database of past work.

Grading System

This course utilizes *student-directed* learning as the primary means of instruction and evaluation.

Weekly lecture videos and quizzes: watch the video, take notes, and answer the quiz questions embedded in the videos.

Lecture notes and video stats: You are expected to take notes while watching the lecture videos. Specifically, you will be required to turn in your lecture notes at the end of the course. Your notes can be in whatever form you like (e.g. outline, long form, etc) but should include the important points from the lecture videos. Acceptable formats include word and pdf. In addition, we will be viewing the video stats and incorporating that into the grade to ensure you fully watched all videos. Anyone with a turnitin similarity score higher than 70% on the lecture notes will be suspect – please be careful to use your own words and make sure your work is uniquely your own.

Exams: There will be one midterm and a final exam. The final exam is non-cumulative.

Extra credit short survey

Graded item	%
Weekly lecture videos and quizzes (15)	50%
Lecture notes and video stats	10%
Midterm exam	20%
Final exam	20%
Totals	100%

Policy for excuses

To qualify for special consideration, all excuses must be submitted by email with supporting documentation (i.e. medical note, army drill notice, etc). Excuses submitted 'before' the event are given more weight. Whether or not special consideration is given is entirely at the discretion of the instructor. *Excuses without supporting documentation will not be granted. Do not email asking for special consideration without including supporting documentation.*

Things that do not qualify: vacation, work travel, long hours at work, etc.

How to do well in this class

Each weekday over the next three and a half weeks a new topic (unit) will be introduced. You will be expected to review the video and take a quiz for each topic.

One note: this is a 16 week class shrunk down into just three and a half weeks. It will be intense. On average you would normally spend 3 hours/week in class plus additional time outside class for assignments. Since each unit here is the equivalent of a single week of normal class, be prepared to spend several hours per day for each unit's topic.

To do well in this class you should:

- Watch each video on the day it is assigned
- Take notes on the videos
- Take the quiz before the deadline
- Meet all deadlines
- Review your notes before the exams and make sure you understand the basic concept of each unit

Class schedule

Note: all due dates are at midnight unless otherwise noted

Unit	Assigned Date	Online video Topic	Chapter	Quiz Due Date
1	Jul 23	Aquatic ecology intro	1	Jul 24
2	Jul 24	Water in Landscapes	11	Jul 25
3	Jul 25	Water as environment	2	Jul 26
4	Jul 26	Small animals	3	Jul 27
5	Jul 27	Medium sized animals	4	Jul 30
6	Jul 30	Large organisms	5	Jul 31
7	Jul 31	Population dynamics	6	Aug 1
8	Aug 1	Video: Blue Gold		Aug 2
9	Aug 2	Midterm Exam (units 1-8)		Take exam before midnight Aug 3
10	Aug 6	Killer Lakes		Aug 7
11	Aug 7	Communities	7	Aug 8
12	Aug 8	Community ecology	8	Aug 9
13	Aug 9	Energy flow	9	Aug 10
14	Aug 10	Chemical cycles	10	Aug 13
15	Aug 13	Citizen limnology	12	Aug 14
16	Aug 14	Video: In Our Water		Aug 15
17	Aug 15	Final Exam (units 10-16) and submit lecture notes Optional short survey for extra credit		Take exam & submit lecture notes before midnight Aug 15