syllabus update sept 27

DUKE UNIVERSITY MARINE LAB

ENV 287A, ENV 785A; MARSCI 287A

Marine Conservation and Service Learning

Fall 2021

Syllabus

Class Schedule:	MWF 8:30am-9:20am Repass Lecture Hall
Instructor:	Liz DeMattia
Office:	Bookhout 312
Phone:	n/a
Email:	Ead40@duke.edu
Course website:	On Sakai
Office Hours:	MW 10-11am
Prerequisites:	Introductory Biology
Required text:	Primack *Essentials of Conservation Biology*, SIXTH edition

COURSE DESCRIPTION

The general objectives of this course are to introduce conservation biology, explore how humans affect biodiversity, investigate the multidisciplinary approaches used to document changes in biodiversity, and explore service learning as a way to make positive change. Lectures will focus on understanding topics in conservation biology (with a focus

toward marine ecosystems and restoration), and discussion sections and service learning build on lecture material. Prerequisite: introductory biology.

COURSE EVALUATION for undergraduates– (385 point possible)

Component	**Due Dates**
Mid-term exam (100 pts)	Oct 1
Final Exam (150 pts)	Dec 8 (but it may change)
Random class discussion participation/assignments (15 pts)	On going
Service Learning Project (120 pts)	
Preliminary write up (70 pts) • Literature review (40 pts) • Connecting to Service Learning (15 pts) • Presentation (15) pts	Sept 17
Project Participation/Group Success (10 pts)	*On going*
Project Presentation final (20 pts)	November 29 & Dec 1
SL Project impact paper (20 pts) • Impact memo (10 pts) • Project description (10 pts)	December 3

COURSE EVALUATION for graduate students– (415 point possible)

Component	**Due Dates**
Mid-term exam (100 pts)	Oct 1
Final Exam (150 pts)	Dec 8 (but it may change)
Random class discussion participation/assignments (15 pts)	On going

Service Learning Project (120 pts)	
Preliminary write up (70 pts) • Literature review (40 pts) • Connecting to Service Learning (15 pts) • Presentation (15) pts	Sept 17
Project Participation/Group Success (10 pts)	*On going*
Project Presentation final (20 pts)	November 29 & Dec 1
SL Project impact paper (20 pts) • Impact memo (10 pts) • Project description (10 pts)	December 3
Conservation Project evaluation component (30pts) • Background literature review (10 pts) • Evaluation project design (10 pts) • Evaluation project analysis (10 pts)	Lit Review due Sept 24 Project Design due Oct 22 Project Analysis due Dec 3

Exams

Exams are cumulative and will cover material from lectures, discussions and readings. Writing of all exams is mandatory. There will be absolutely **NO** make-up exams because you are not satisfied with your marks. Make-up tests or exams are only available in cases of illness, if you notify me ahead of time, or provide a doctor's note.

Discussion

Discussion Groups are organized so that students have an opportunity to read and discuss current primary and secondary literature. ALL students are responsible for reading the articles and participating in the discussion. Articles will be available on the course website.

Service Learning Project

Students will develop group conservation outreach projects (from 1-3 students per group). Each group is responsible for conducting the outreach, presenting their project to the class, and each student will submit individual papers. Student presentations will be assessed by the course instructor. Further detail on this project will be available.

Project Evaluation component of Outreach Project – graduate students only

Graduate students will be responsible for creating an evaluation rubric for their outreach project as well as conducting the evaluation and assessing the results of the project evaluation. This component will include background readings and discussion on program evaluation, evaluation design and evaluation analysis.

Attendance and Participation

Attendance is mandatory. Lectures may include material not found in lecture notes, in assigned readings or covered in discussions. You must contact the instructor as soon as possible if you anticipate missing a lecture or discussion for a "valid" reason. Unexcused absences may result in a lowering of your overall grade (especially your participation component).

Students with a disability who require academic accommodation are encouraged to contact me as soon as possible.

Grading Scheme

Percentage	**Grade**
90-100	A
80-89	B
70-89	C
60-69	D
50-59	F

SAKAI

SAKAI will have an outline of MODIFIED powerpoints/lecture notes posted after the lectures. I WILL NOT post the full lecture power points, as it is your responsibility to take notes during lectures. References for discussion articles will also be available via Sakai.

STUDENT CONDUCT

All students are expected to follow DUML's Student Conduct Code. Academic misconduct (cheating, fabrication, plagiarism, and facilitation of academic misconduct or non-attendance) of any kind will not be tolerated! Any academic misconduct will be dealt with in accordance with policies at Duke and will result in a final grade of "F", a report to the Dean and a permanent record in the student's academic file.

COURSE SCHEDULE (definitely subject to change)

Dates 2021	**Lecture**	**Readings**

	(Monday, Wednesday, Friday)	
Week 1 Aug 23	▪ Intro to Conservation Biology & ▪ History of Conservation Biology ▪ *Discussion organization AND Intro to Conservation Project with brainstorming session*	▪ Primack chapter 1/2 ▪ Watch *Ken Burns documentary)Part I: The scripture of Nature* ▪ *Resilience article: (Chowdhury)* ▪ Resilience article:
Week 2 Aug 30	▪ Values and Biodiversity I ▪ Values and Biodiversity II ▪ *Conservation Project (work day)*	▪ Primack chapter 3&4 ▪ Ecosystem Services: The problem with making nature pay for itself (Simpson) ▪
Week 3 Sept 6	▪ Values and Biodiversity II ▪ Values continued ▪ *Conservation Project (work day) AND Community Engagement discussion*	▪ Primack chapter 4-6 ▪ https://thenarwhal.ca/clayoquot-sound-tofino-after-war-woods/ ▪ Extra values article: Ehrenfeld: Ehrenfeld 1988. "Why put a Value on Biodiversity?" in EO Wilson and FM Peter (eds). Biodiversity. National Academy Press, Washington DC. P 212-216.
Week 4 Sep 13	▪ Values continued… with debate and Community Engagement 101 ▪ Population Biology & Ecology in conservation ▪ Service Learning prelim presentations (Sept 17 Preliminary write up due)	▪ Primack chapter 5 & 6 ▪ Community engagement readings from NAAEE booklet ▪
Week 5 Sept 20	▪ Population Biology & Ecology in Conservation continued ▪ Guest lecture: Human influence on ecosystems (Laura Givens ▪ Restoration and Resilience discussion (Lit review for evaluation due)	▪ Primack chapter 12
Week 6 Sept 27	▪ Conservation of small populations ▪ Conservation of Small Populations continued and reading discussion (novel species and vaquita article)	▪ Primack 11 & 12 ▪ Marris, E. 2010. The New Normal. Conservation 11(2): 13-17.

	▪ *MID TERM*	▪ Davis, M. et al. 2011. Don't Judge Species on their origin. Nature474(7350): 153-154. ▪ Vaquita articles
Week 7 Oct 4	▪ BREAK -- NO CLASS MONDAY ▪ Conservation of Small Populations ▪ *Conservation Project Work day*	▪ Citizen Science articles
Week 8 Oct 11	▪ Conservation and Citizen Science continued ▪ Guest Lecture Dr. Matthew Godfrey: Conservation and volunteers (ex: Sea Turtles in NC) ▪ *Conservation Project Work day*	▪ Turtle conservation article
Week 9 Oct 18	▪ Conservation and citizen science ▪ Human Dominated Ecosystems ▪ *Discussion Group TBD or microplastics in turtle stomachs (lab)* Evaluation project design due	▪ Primack chapter 7 ▪ Articles for discussion
Week 10 Oct 25	▪ Extinctions ▪ Habitat Destruction/Fragmentation ▪ *Conservation Project Work day*	▪ Primack chapter 8
Week 11 Nov 1	▪ Overexploitation, exotic species, disease ▪ Conservation strategies-new populations ▪ *Conservation Project work day*	▪ Primack chapter 9 & 10
Week 12 Nov 8	▪ Conservation strategies-protected areasI ▪ Conservation strategies –protected areas II ▪ *Citizen Science discussion*	▪ Primack chapter 13 & 15
Week 13 Nov 15	▪ Conservation strategies –protected areas III ▪ Conservation strategies – outside protected areas ▪ *Conservation Project work day*	▪ Primack chapter 16 - 18
Week 14 Nov 22	▪ Emerging issues TBD ▪ THANKSGIVING -- NO CLASS ▪ THANKSGIVING -- NO CLASS	

Week 15 Nov 29	▪ PRESENTATIONS ▪ PRESENTATIONS ▪ REVIEW and CO impact paper and evaluation due	
Week 16	▪ **Final Exam date TBD**	