# WELCOME to INTRODUCTION TO CONSERVATION BIOLOGY



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# NRM/BIOL 277: INTRODUCTION TO CONSERVATION BIOLOGY

Spring Semester 2020

Meeting Time: Tuesday and Thursday 11:30 AM -1:00 PM when discussions are due

Classroom: Online

Instructor Gino Graziano, Instructor of Invasive Plants and Forest Health Office: Gino Graziano, Office located in Anchorage, call or e-mail 786-6315,

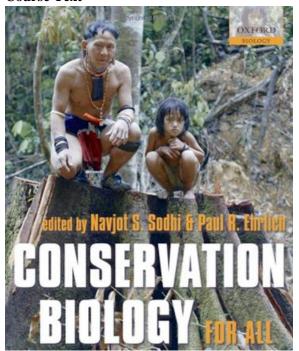
Email gagraziano@alaska.edu.

Office Hours - (arrange in advance to confirm) Tuesday and Thursday 9:00-1:00 pm; Monday,

Wednesday, Friday by appointment (9:00 to noon preferred).

Connect with me via zoom at those times. To connect use this link. https://zoom.us/j/305990529

#### **Course Text**



Download Conservation Biology For All, by Navjot S. Sodhi and Paul R. Ehrlich free mongabay.com/conservation-biology-for-all.html

Chapter readings are posted to Blackboard.

## **Course Description**

This course will provide an overview of: (1) the principles of the science of conservation biology and the contributions of several different integrative levels (genetic, population, ecology, earth system, and social science) of interdisciplinary science to problems in conservation biology

- (2) the framework of organizations, laws, programs, and land management systems that are specifically focused on identifying, protecting, and maintaining natural diversity in the U.S., selected other nations, and international programs (3) current topics in conservation biology including climate change, invasive species, human modified landscapes, and changing fire regimes
- (4) the role of people in conservation including outreach and education in generating support,

Traditional Ecological Knowledge, and how conservation goals are framed and achieved

### **Course Structure**

- (A) The course consists of online discussions of readings to cover the scientific principles of conservation biology and the value-based rationales that drive conservation biology. Early in the course students choose a conservation topic that they will address in their class discussions and reports. The chosen topic must be approved by the instructor.
- (B) Students will provide an oral presentation approximately every two weeks that summarizes their chosen conservation topic in the context of the previous course topics learning objectives. Each student will present key parts of their report to the class filling 10 minutes. Student presentations will include visual aids. Students are expected to ask and respond to questions online in a discussion forum for each presentation.

# Supplemental Readings (to be posted on the course Blackboard site)

Current scientific journals, resource management articles, and news/analysis articles

#### **Conservation Biology Issue report**

Students will choose a conservation biology issue to develop a comprehensive report that students will build on throughout the semester. With each course lesson students will be asked to relate their topic to learning objectives in the discussion forum. The report use the course topics as a general outline, with required elements to address in the report provided by the instructor as learning objectives. Approximately every other week students will present to the class their topic as it pertains to the associated learning objectives. Presentations will be posted to Alaska.edu YouTube and shared with the class via Blackboard (details below). Topics selected may be either, conservation of a

specific area (e.g. watershed, National Park, Wildlife Reserve), species, habitat type, or natural resource. Topics will be approved by the instructor. Students are encouraged to pursue their own interests in choosing a report.

- E. Habitat fragmentation
- F. Overharvesting
- G. Fire and biodiversity
- H. Climate change
- I. Invasive Species

#### **COURSE TOPIC OUTLINE**

Topic I Principles and drivers of change

- A. Conservation Biology as a changing science/Role of People in Conservation
- B. Biodiversity
- C. Ecosystem function and services
- D. Habitat destruction

# Topic II Conservation into practice

- A. Preventing extinctions
- B. Endangered species management
- C. Conservation planning and priorities
- D. Conservation in human modified landscapes

# **ASSIGNMENTS & GRADING**

# **Grading Policy**

## I. Midterm - 10% of Course Grade

A midterm exam that is comprehensive for previous covered lessons will be given. The exam will focus heavily on learning objectives. Since this is an online course, I expect that you will use your books, notes, readings, and online materials to complete exams. This is ok, just make certain that you turn in your own work. If you turn in answers that are written exactly the same as others or are copied from online sources I will give you a new test with new questions to answer, and if this persists a failing grade will be given.

#### The goals are to:

- 1. Provide students the opportunity demonstrate mastery of course topics and learning objectives.
- 2. Build critical thinking skills.
- 3. Provide the opportunity to demonstrate understanding of learning objectives in a written form.

#### II. Student Presentations (first 5) - 20% of Course Grade

Students will give an oral presentation that highlights the key points from the learning objectives. Presentations will include visual aids as appropriate. Students will be graded on the organization and clarity of the presentation, appropriate use of visual aids, covering the topics in enough depth to provide a basic understanding of the topic, and response to questions and comments. Students will also be graded on their engagement with presenters by asking questions and making constructive comments. The length of presentation will be approximately 10 minutes.

## *The goals are to:*

- 1. Provide an opportunity for all students to understand the variety of conservation topics chosen.
- 2. Give students experience in summarizing a specific topic within a strictly limited time for presentation, making sense of it, and identifying the most relevant points to reach conclusions.
- 3. Give students experience in speaking before their peers, with special emphasis on speaking cogently and fluently.
- 4. Develop critical thinking skills resulting in questions and constructive comments that improve our understanding of a subject.

# III. Class Response - 20% of Course Grade

Students will be expected to participate in discussions of course reading topics, and respond to questions asked by the instructor and peers. Students will discuss which learning objectives are highly relevant to their chosen conservation topic, and they intend to research in greater detail. Timely response to lesson questions is an obvious requirement of achieving this course grade, and it is imperative that all students read the materials, view lecture videos and supplemental materials, and respond to course questions in a timely fashion. Students will be graded on providing appropriate responses to questions and constructive comments that help develop deeper understanding of the subject. Class response to reading/supplemental materials, lectures, and associated questions must be complete prior to the 11:30 am the Tuesday or Thursday of the assignment, and response to others questions and comments must occur by midnight that day. Example: For a reading/lecture video on Tuesday respond to all instructor questions prior to 11:30 am that Tuesday. Response to the instructor's comments and providing comments on others responses is required by midnight that same Tuesday. You must comment on at least one other student's response to a question.

#### Rationale:

- 1. Higher concepts are developed when students discuss assigned readings as it pertains to broad conservation biology concepts and their conservation biology topic.
- 2. Interaction with the instructor and peers allows students to demonstrate knowledge and understanding for concepts.
- 3. Discussing readings as they pertain to the student chosen conservation topic will improve written and oral assignments, and the process of developing ideas for those assignments.
- 4. Interaction with peers and the instructor is a tangible demonstration of the seriousness of the student toward the course.

# IV. Final paper - 20% of Course Grade

Students will be expected to write an 8-12 page summary of their conservation topic as it pertains to outlined learning objectives that address the previous chapter lessons and assigned readings, and all comments made by the instructor. Must also include evaluation of conservation efforts, and recommendations for future conservation actions related to the topic. Final papers will be graded on turning in the assignment on time, clarity of writing, punctuation and grammar, citation of appropriate scientific literature and reports related to the conservation topic, organization of larger technical report, and covering each learning objective with an appropriate level of depth to a) demonstrate student understanding of the learning objective, and b) is appropriate for the chosen conservation topic. The final paper will build on the most pertinent concepts and provide final summary recommendations for appropriate conservation goals and actions pertaining to the topic.

# The goals are to:

- 1. Provide students the opportunity to pursue a conservation biology topic they are most interested in.
- 2. Build technical writing skills.
- 3. Provide the opportunity to demonstrate understanding of learning objectives in a written form.
- 4. Build skills in searching for, understanding, and citing scientific literature.
- 5. Build skills in compiling and organizing a large report.
- 6. Build skills in responding to comments provided by reviewers, in this case the instructor.

#### V. Final Presentations - 20% of Course Grade

The last three class periods will be set aside for students to present their final reports. Each student will give a presentation lasting approximately 20 minutes with an additional 10 minutes allowed for questions and discussion (questions and discussions may be online). The student's oral presentation will highlight the key points from the final paper. Presentations will include visual aids as appropriate. Students will be graded on the organization and clarity of the presentation, appropriate use of visual aids, covering the topics in enough depth to provide a basic understanding of the topic, and response to questions and comments. The final presentation will build on the most pertinent concepts and provide final summary recommendations for appropriate conservation goals and actions pertaining to the topic.

#### *The goals are to:*

- 1. Provide students an opportunity to orally present their summaries, and recommendations for conservation goals and actions that pertain to the chosen topic.
- 2. Provide an opportunity for all students to understand the variety of conservation topics chosen.
- 3. Give students experience in summarizing a large report within a strictly limited time for presentation, making sense of it, and identifying the most relevant points to reach conclusions.
- 4. Give students experience in speaking before their peers, with special emphasis on speaking cogently and fluently.
- 5. Develop critical thinking skills resulting in questions and constructive comments that improve our understanding of a subject.

# VI. Final Exam- 10% of Course Grade Due April 28th by 11:59 pm

A final exam that is comprehensive for previous covered lessons will be given. The exam will focus heavily on learning objectives. Since this is an online course, I expect that you will use your books, notes, readings, and online materials to complete exams. This is ok, just make certain that you turn in your own work. If you turn in answers that are written exactly the same as others or are copied from online sources I will give you a new test with new questions to answer, and if this persists a failing grade will be given.

## *The goals are to:*

- 1. Provide students the opportunity demonstrate mastery of course topics and learning objectives.
- 2. Build critical thinking skills.
- 3. Provide the opportunity to demonstrate understanding of learning objectives in a written form.

#### VII. Late assignment policy

Unexcused late assignments will have their final score lowered by 5% of the maximum allowable score for every day the assignment is late.

# ADDITIONAL INFORMATION: PRESENTATION AND PAPERS

# **Recording and posting presentations:**

To record videos that include slides from programs such as Powerpoint utilize Screencast-o-matic (<a href="https://screencast-o-matic.com/">https://screencast-o-matic.com/</a>), a free video recording and editing software. The completed video will be uploaded to your University of Alaska YouTube account and shared via blackboard. Here are some tips and tricks for making your screen recording.

- **Step 1.** Write a script and or storyboard for your presentation.
- **Step 2.** Practice to make sure the lighting, camera angle, audio, and background all look good. Practice a few times to get comfortable.
- Step 3. Record your video.
- **Step 4.** Upload your video to YouTube:
  - 1. Go to YouTube.com and log in with your @alaska.edu account. The first time you do this, you will be walked through some steps to set up your account. Contact your instructor if you run into trouble. Click on the upload button at the top of the YouTube account. You can set the privacy level to either Unlisted or Public.
  - 2. Once your video is uploaded to YouTube, copy the URL
- **Step 5.** Paste the URL into a new post on Blackboard in the "Presentations" section. Don't link the URL, just paste the plain text.
- **Step 6.** View the post and make sure that your presentation shows up and is viewable through the post.

Are you new to giving presentations? UAF has help available at the UAF Speaking Center. Visit their website (<a href="https://uaf.edu/speak/about/">https://uaf.edu/speak/about/</a>) for more information.

# Paper:

Turn in papers via e-mail to the instructor (gagraziano@alaska.edu), prior to midnight on the due date. Papers should be formatted with Times New Roman size 12 font, single spaced, with 1 inch margins. Citations may use any recognized format you are familiar with, but make sure and be consistent using only one citation style. Images and figures may be used, but should be included in appendices labeled Appendix 2 Figures. Appendix 1 will include any learning objectives you found irrelevant to your subject. In this section you must define the learning objective and explain why it is irrelevant to your conservation topic. Appendix 1 will count towards your total page numbers, but will not count against you if you go

over. Note that page numbers are a guide, and you aren't really graded on page numbers. If you cover the material adequately, and write concisely you will achieve the appropriate number of pages.

Are you new to writing papers? UAF has a Writing Center that can provide you with assistance. Visit their website (https://www.uaf.edu/english/writing-center/) for more information.

# **Student Protections and Services Statement:**

Every qualified student is welcome in my classroom. As needed, I am happy to work with you, disability services, veterans' services, rural student services, etc to find reasonable accommodations. Students at this university are protected against sexual harassment and discrimination (Title IX), and minors have additional protections. As required, if I notice or am informed of certain types of misconduct, then I am required to report it to the appropriate authorities. For more information on your rights as a student and the resources available to you to resolve problems, please go the following site: www.uaf.edu/handbook/