

# O'Neill

Lead for the Greater Good

O'Neill School of Public and Environmental Affairs  
*SPEA E557 Conservation Biology (30399)*  
*SYLLABUS – Spring 2025 DRAFT*

**Instructor:** Gwen M. White, [whiteg@iu.edu](mailto:whiteg@iu.edu), TX 317-492-0118 (voice & text)

**Class Meeting:** SPEA PV 278, Mondays & Wednesdays 3:55 pm – 5:10 pm ET

**Office Hours:** Send a text or email to schedule an appointment by Zoom or phone call, including evenings or weekends. Text for urgent questions or concerns.

**Zoom Connections (if needed):** URL - <https://iu.zoom.us/j/9273232615>

Meeting ID: 927 323 2615 (no passcode needed)

Phone audio connections, if not using the computer microphone: 305-224-1968 US

**Course Description:** E557 Conservation Biology (3 cr.) Prerequisite: an upper division or graduate course in ecology or a waiver for E527. Ecological principles associated with rare species and with biodiversity, laws and statutes used to conserve biodiversity, and land and species management practices. Our aim is to understand scientific and political complexities of conservation biology, and to study different methods used to conserve living resources and resolve conflicts associated with conservation.

**Learning Outcomes:** *By the end of the semester students should be able to...*

- Apply scientific concepts associated with conservation of biodiversity and rarity.
- Describe US laws and international treaties associated with conservation.
- Identify major issues facing policy makers and managers, including some of the primary sources of conflict and approaches to co-management of ecological systems.

## **Skills**

- Familiarity with VORTEX population viability modeling software and its uses.
- Basic familiarity with various ecological and facilitation tools including Miradi conservation planning software.
- Technical writing and technical presentations skills.
- Efficient and effective use of peer-reviewed and other authoritative literature.

## **O'Neill School expectations of civility and professional conduct<sup>1</sup>**

The O'Neill School takes matters of honesty and integrity seriously because O'Neill is the training ground for future leaders in government, civic organizations, health organizations, and other institutions charged with providing resources for the public, and for members of society who are vulnerable and who are lacking in power and status. Precisely because O'Neill graduates tend to rise to positions of power and responsibility, it is critical that the lessons of honesty and integrity are learned early.

O'Neill requires that all members of its community – students, faculty, and staff – treat others with an attitude of mutual respect both in the classroom and during all academic and nonacademic activities outside the classroom. A student is expected to show respect through behavior that promotes conditions in which all students can learn without interruption or distraction. These behaviors foster an appropriate atmosphere inside and outside the classroom:

- Students are expected to attend class regularly and to be prepared for class.
- Students must be punctual in their arrival to class and be present and attentive for the duration of the class. Eating, sleeping, reading the newspaper, doing work for another class, wandering in and out of the classroom, and packing up or leaving class early are not civil or professional behaviors.
- Students must abide by the course policy regarding use of electronic devices in the classroom.
- Students must responsibly participate in class activities and during team meetings.
- Students must address faculty members, other students, and others appropriately and with respect, whether in person, in writing, or in electronic communications.
- Students must show tolerance and respect for diverse nationalities, religions, races, sexual orientations, and physical abilities.
- Students must not destroy or deface classroom property nor leave litter in the classroom.

## **Course Requirements:**

We will be moving briskly during the course. During class discussions, we will delve into how to apply the concepts in working situations. What you take away from this course will depend, in large part, on how well you prepare in advance. Please review the lectures and readings comfortably on time, with attention to discussion questions. Jot down your answers, rather than writing out fully phrased statements. Class time will be spent in discussion, not in reading what you wrote on the page.

This will be an online course with asynchronous recorded lectures and synchronous class discussions held twice a week on Mondays and Wednesdays. As a matter of logistical convenience as well as courtesy, I encourage you to sign on a few minutes ahead of class time.

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<sup>1</sup> These expectations are excerpted from the O'Neill School Honor Code which can be found at:  
[https://oneill.indiana.edu/doc/undergraduate/ugrd\\_student\\_honorcode.pdf](https://oneill.indiana.edu/doc/undergraduate/ugrd_student_honorcode.pdf)

**Teaching Philosophy:** Your work in this course will simulate the kind of project development, reporting, and presentation that you will find in the workplace. The professor will critique you according to standards you may encounter as you begin a job using these types of tools. We want you to be fully prepared to compete successfully in the workforce with an awareness and understanding of how to function well on a team and individually using these tools to solve the complex physical and social challenges confronting agency and NGO staff in today's world.

As scientists, policy makers, managers, or informed voters, we function best when we take advantage of all our abilities. Thus, you will see questions coming from a variety of different directions in lectures, in our reading discussions, and in tests; you should take full advantage of all your training in your search for conservation solutions. Given that the level and kind of training varies considerably among students, we will consider this factor in grading.

**Grading (percentage for each assignment):**

Class Attendance & Participation	10 %
Homework and Quizzes	40
Vortex output and write-ups (2)	10
Papers	20
Presentations	<u>20</u>

Total points: 100 %

**Paper and presentation** guidelines are available on Canvas and will be discussed at length in class.

Take home and quizzes will be **open book, untimed and submitted online. There is no exam during finals week.**

**Academic Integrity:** No form of academic dishonesty will be tolerated. This course requires individual integrity and professionalism from all students. If academic dishonesty is proven, you will receive a grade of zero for the work; repeat offense is grounds for failure in the course. You are responsible for understanding the concept of plagiarism and for avoiding it at all times. Some work for this course is supposed to be done in groups. I will distinguish carefully between group work and individual work, and you should do the same.

A PowerPoint on plagiarism and appropriate citation is available on Canvas.

**Note Selling:** Several commercial services have approached students regarding selling class notes/study guides to their classmates. Selling the instructor's notes/study guides in this course is not permitted. Violations of this policy will be reported to the Dean of Students as academic misconduct (violation of course rules). Sanctions for academic misconduct may include a failing grade on the assignment for which the notes/study guides are being sold, a reduction in your final course grade, or a failing grade in the course, among other possibilities. Additionally, you should know that selling a faculty member's notes/study guides individually or on behalf of one of these

services using IU email, or via Canvas may also constitute a violation of IU information technology and IU intellectual property policies; additional consequences may result.

**Materials:** The faculty member teaching this course holds the exclusive right to distribute, modify, post, and reproduce course materials, including all written materials, study guides, lectures, assignments, exercises, and exams. While you are permitted to take notes on the online materials and lectures posted for this course for your personal use, you are not permitted to re-post in another forum, distribute, or reproduce content from this course without the express written permission of the faculty member. Any violation of this course rule will be reported to the appropriate university offices and officials, including to the Dean of Students as academic misconduct.

Please review your responsibilities as a student at <https://studentcode.iu.edu/>.

**Texts (no purchase required):**

REQUIRED: Sodhi, N. S., P. R. Ehrlich, eds. 2010. Conservation Biology for All. Oxford University Press. ISBN 978-0-19-955424-9. Individual chapters will be linked in the weekly Modules. *The electronic version is available online in its entirety at no cost (or can be purchased in print form if desired):* <https://conbio.org/publications/free-textbook/>

OPTIONAL: Groom, M.J., G.K. Meffe, C.R. Carroll, and contributors. 2006. Principles of Conservation Biology, 3rd ed. Sinauer Press, Sunderland, MA. 816 pp. ISBN 978-0-87-893597-0 -- *can serve as a background text for those who need further reading.*

Recordings of **asynchronous lectures** and the **supplementary readings** will be posted weekly in the Modules. If you prefer offline access to the presentations for lectures and class discussions, as well as readings, you may download them from the Lectures or Readings subfolder in Files on Canvas. Recorded lectures generally will become available at least two weeks in advance of the scheduled topic.

**Software:** no purchase required.

- Download VORTEX software for PC devices at no cost from <https://scti.tools/downloads/#SoftwareAndManuals>.
  - If you are not on a PC, use [IUanyWare](#) to stream applications to your device.
- Unless you already have a subscription, you may want to wait until Week 13 to obtain the Miradi software (60-day free trial) from the download tab called Miradi Desktop at [www.miradi.org](http://www.miradi.org).

We may access other software periodically during the course, also available at no cost.

## Course Policies

**Attendance:** Most class sessions will involve either in person training or small group exercises that are difficult to replicate later. Therefore, please attend unless you are ill or there is an emergency. Where possible, class will be recorded and posted. However, the active format may make online attendance less satisfying. If you must miss class, contact the instructor, watch the session recording, and turn in assignments on time.

**Late Assignments:** If you know you will turn in an assignment late, please communicate with the instructor in some way BEFORE the due date or as soon as possible to request an extension. Generally, I am flexible by a day or two on written assignments. You will typically have the assessments for 8-10 days and should be able to pace yourself to finish by the due date.

**General assistance:** Students routinely need some support in two general areas: technical writing and life getting out of control.

(1) Some of you will never have done any technical writing or may generally have difficulty writing. We will be discussing the topic briefly in class, and there is a review of technical writing on Canvas. If you still feel in some doubt, please check with me. I may recommend that you visit the Writing Tutorial Service on the first floor of the Learning Commons in the Wells Library. To schedule a tutoring session, call **812-855-6738** and indicate you are looking for help with professional or technical writing.

Students who are unsure of their technical writing skills may find the following book useful: *Academic Writing for Graduate Students* by Swales and Feak (PE 1404 S93 1994). This book is available at the Business/SPEA Information Commons if it has not been checked out. If it has been checked out, you can recall it. It is written specifically for students who do not speak English as a first language. You can also Google *technical writing* or *professional writing*.

(2) You may find yourself facing more than you can easily handle during the semester. It may be something wonderful, or it may be something terrible, but it will make it difficult or impossible for you to focus, work, think, or otherwise deal normally with the semester. Whatever may have happened, please remember that the Health Services folks have people whose primary job is helping students survive such problems, and your professors are aware that these things can happen. SPEA now has a Counselor-in-Residence from Student Health Services. Dr. Silva has office hours in the SPEA building each week. Information on scheduling a meeting with him is on MySPEA – if you can't find it, Ms. Jericka Parker in the MPO can help. And, as always, you can go directly to the Health Services building. Counseling is confidential and often very practical. When your brain is not working well, someone else's can be a great help.

I try to be flexible and helpful about disruptions, although I will want a minimal justification for doing so. I can extend deadlines on assignments and reschedules tests and quizzes. If needed, the university allows us to grant incompletes to students if they are in good standing when the incomplete is requested, allowing up to a year of additional time to complete course requirements.

It is easier to help if we know something is going on. Please try to be in touch as soon as you can. It makes it easier for all of us in the long run, even if it is difficult in the short run. You do not owe us the details. A message that life has become difficult or complex and some idea of what kind of timeframe you think might be involved will help us to help you best.

**Schedule & Assignments:** *The schedule below is subject to change in the event of extenuating circumstances.* Assignment due dates are fixed, unless otherwise noted by instructors during the course. Materials and deadlines will generally be available on Canvas; if they do not appear there, contact your instructor immediately. Guest speakers may change throughout the semester.

Recordings for CB Lecture # or Class # will correspond to presentation File names in Canvas.

WEEK 1	Mon 1/13	Wed 1/15
Content	CB Lecture 1 – <b>Course introduction &amp; History of Conservation Biology</b>	CB Lecture 2 - <b>Biodiversity Importance</b>
Readings	Ch. 1; Montgomery 2020; Wallach 2020; Sutherland 2021	Ch. 2; Palumbi 2009; Tilman 2012; Joosse 2022; Senko 2022.  Read one by your last name: Sonnenblume 2019, Sonner 2020 or TribLive 2020
Class / Assignment	CB Class 1 – Introductions & Overview  <b>Initial Survey</b> on student experience, internet access, software functions, topics of interest, etc. (due midnight Tuesday)  <b>Discussion Board: Introduce Yourself</b> (due midnight Tuesday)  <b>Accessibility Acknowledgement</b> (due midnight Tuesday)  <b>Horizons Scan, Sutherland 2021</b> (consider a topic for your <b>written brief due Week 4</b> )	CB Class 2 – <b>Ethics in ESA: How does a species stack up against green technology in importance? (class discussion based on case prepared by Robert L. Fischman, IU Law Professor)</b>  <b>Personal reflection on your guiding principles for conservation</b> based on Montgomery 2020 & Wallach 2020 (due after class discussion)  <b>Managing for ocean biodiversity</b> , Palumbi 2009 (reading questions due before class)  <b>Discussion Board: Biodiversity Hotspots</b> (post Friday & respond Tuesday)
WEEK 2	Mon 1/20	Wed 1/22
Content	<b>Martin Luther King, Jr. Day (class does not meet)</b>	CB Lecture 3 - <b>Biodiversity Patterns</b>
Readings	No readings	Ch. 3 & 4; Hamilton 2022; Kelt 1996; Harvey 2021; Riisager-Simonsen 2020 ( <i>NatureServe webinar</i> ); Hanski 1998
Class / Assignment		CB Class 3 – <b>Populations &amp; Communities</b>  <b>Metapopulation dynamics</b> , Hanski 1998  <b>Community structure of small desert mammals</b> , Kelt 1996 (reading questions)  <b>Quiz #1 Biodiversity Concepts due FRIDAY</b>

WEEK 3	Mon 1/27	Wed 1/29
Content	CB Lecture 4 - <b>Biodiversity Assessment</b>	CB Lecture 5 - <b>Demography</b>
Readings	Ch. 6 & 16; Choe 2022; Prasetyo 2023; Eyre 2012; Harvey 2021; Toropov 2021, Marshall 2021; Rosner 2024	Ch. 12; Mitchell 2010; Torgovnick 2013
Class / Assignment	<p>CB Class 4 – <b>Citizen Science</b> (instructor-led class discussion)</p> <p><b>Readings on terrestrial vertebrate surveys</b>, Eyre 2012 (<i>reading questions before class</i>)</p> <p><b>Struggling seabirds wave red flag about ocean health</b>, Harvey 2021; discussion)</p> <p>Rosner, H. (2024, July 30). <a href="#">The “internet of animals” could transform what we know about wildlife</a>. Yale Environment 360.</p> <p><a href="#">DOWNLOAD VORTEX on your PC computer</a> or if you do not use a PC, ensure you have <a href="#">access to IU AnyWare</a> (<i>confirm this action by responding to the quiz before class on Wednesday</i>)</p>	<p>CB Class 5 – <b>Reproductive considerations</b> (discussion)</p> <p><b>Readings on temperature-dependent sex determination in tuataras</b>, Mitchell 2010 (<i>reading questions before class</i>)</p> <p><b>Quiz #2 Assessment &amp; Demography due FRIDAY</b></p>
WEEK 4	Mon 2/3	Wed 2/5
Content	CB Lecture 6 - <b>Introduction to Population Viability Analysis (PVA)</b>	CB Lecture 7 - <b>PVA Tools &amp; Vortex Assignment</b>
Readings	Ch. 10; Cancino 2010	Sutherland 2025; Review Vortex Software Manual
Class / Assignment	<p>CB Class 6 – <b>Tools Training: Vortex software training</b> (<i>guest instructor Dr. Vicky Meretsky, IU SPEA, invited</i>)  <a href="http://www.cpsg.org/download-vortex">http://www.cpsg.org/download-vortex</a></p> <p><b>PVA for pronghorn antelope</b>, Cancino 2010 (<i>reading questions</i>)</p>	<p>CB Class 7 - <b>Tools Training: Vortex software training continued</b> (<i>guest instructor Dr. Vicky Meretsky, IU SPEA, invited</i>)</p> <p><b>Horizons brief (1-page) on Sutherland 2025 due FRIDAY by midnight on Canvas.</b></p>



WEEK 5	Mon 2/10 – Class does not meet.	Wed 2/12
Content	CB Lecture 8 - <b>Conservation Genetics</b>	CB Lecture 9 - <b>Threats to Biodiversity</b>
Readings	Ch. 11; Rott 2017; Fox 2008; Grossman 2022; Brulliard 2019; Wallace 2021; Robinson 2021; Tibbetts 2022; Limn 2013	Ch. 15; Gill 2021; USFWS 2007; Hanson 2018; Moodley 2010; Howell 2022; Janetsky 2021
Class / Assignment	<p><b>Note: This class on February 10 will be asynchronous (do work on your own).</b></p> <p>CB Class 8 – <b>Tools Training: Strategic Communications for genetics &amp; ethics</b></p> <p><b>Urbanization leads to inbreeding in mountain lions</b>, Rott 2017 (group #1)</p> <p><b>Identity crisis, species concepts and hybrids</b>, Fox 2008 (<b>reading questions</b>; discussion group #2)</p> <p><b>The trouble with tigers in America</b>, Brulliard 2019 (discussion group #3)</p> <p><b>TED Talks on De-extinction</b>, Limn 2013; (discussion group #4).</p> <p><b>Indigenous peoples and local communities as partners in the sequencing of global eukaryotic biodiversity</b>, McCartney 2023 (group #5)</p>	<p>CB Class 9 – <b>Case Study: Armed conflict &amp; biodiversity conservation</b>, Hanson 2018</p> <p><b>SWOT Analysis on Environmental causes and impacts of the genocide in Rwanda</b>, Moodley 2010 (instructor-led discussion).</p> <p><b>Comparative Analysis: War Threatens Ukraine's Wildlife</b>, Howell 2022 (instructor-led discussion)</p> <p><b>SWOT &amp; Comparative Analysis Class Activity</b> (upload responses after class)</p> <p><b>Proposed listing of polar bear with threatened status</b>, Federal Register, US FWS 2007 (<b>reading questions</b>)</p> <p><b>Discussion Board question for Climate Science guest speaker due THURSDAY</b></p> <p><b>Vortex #1 assignment due FRIDAY</b></p>
WEEK 6	Mon 2/17	Wed 2/19
Content	CB Lecture 10 - <b>Global climate change – impacts on biodiversity</b>	CB Lecture 11 - <b>Fragmentation and landscape ecology</b>
Readings	Ch. 8 & 9; Rubenstein 2020; Dinerstein 2020; Welch 2017; Bell 2020; Ferri 2022; CASC projects ( <a href="https://cascprojects.org/">https://cascprojects.org/</a> )	Ch. 5; Franklin 2002; Turner 2001; Schmitz 2015; Wearn 2020; Cayton 2020; Yurk 2021; Doherty 2021
Class / Assignment	<p>CB Class 10 – <b>Tools Training: Climate Smart Planning</b> (class exercise).</p> <p>What is habitat fragmentation, Franklin 2002 (<b>reading questions before Wednesday class</b>)</p> <p>Landscape ecology in theory and practice, Turner, 2001 (<b>reading questions</b>)</p>	<p>CB Class 11 – <b>Climate Adaptation Science Centers address impacts on biodiversity</b> (<b>guest speaker: Desi Robertson, USGS, Midwest CASC, confirmed</b>).</p> <p><b>Vortex #2 assignment due FRIDAY</b></p>

WEEK 7	Mon 2/24	Wed 2/26
Content	CB Lecture 12 - <b>Metapopulations</b>	CB Lecture 13 - <b>Endangered Species Act</b>
Readings	Textbook on metapopulations page 330 in Chapter 16; Laurance 2002; Haddad 2015	Ch. 12; Endangered Species Act; Jacobs 2020; Global Conservation 2020; Sapp, 2023; Bixby 2020; Cote 2021; TWS 2012; Hessami 2022
Class / Assignment	<p>CB Class 12 – <b>Tools Training: Mind Maps for Design of Marine Protected Areas (MPAs) using spatial concepts</b> (instructor-led discussion)</p> <p><b>Readings on metapopulations</b> Laurance 2002; and <b>habitat fragmentation</b>, Haddad 2015 (<b>reading questions on each paper</b>)</p>	<p>CB Class 13 – <b>Legal Action. Guest speaker Alex Silva, FWS Law Enforcement (confirmed)</b></p> <p><b>Midsemester Paper Proposal due FRIDAY</b>            Include title, outline, and 5-item bibliography for midsemester project, indicate <i>ecological or social focus</i>.</p>
WEEK 8	Mon 3/3	Wed 3/5
Content	CB Lecture 14 - <b>Other Laws and Treaties</b>	CB Lecture 15 - <b>Governmental and nongovernmental organizations</b>
Readings	Nowak 2016; Morton 2021	Ch. 14; Glicksman 2014; Bowman 2020; Rodewald 2020
Class / Assignment	<p>CB Class 14 – <b>Point/Counterpoint: Consumptive use as a conservation management tool</b>, Cote 2021.</p> <p><b>Examples of success: No elephants poached in Mana Pools National Park</b>, Global Conservation 2020.</p> <p><b>The price of wildlife: Trophy hunting and conservation in Africa</b>, Sapp 2023</p> <p><b>Why hunting isn't conservation</b>, Bixby 2020</p> <p><b>Debunking the North American model of wildlife conservation</b>. Wildlife for All 2022.</p> <p><b>Reading on CITES</b>, Nowak 2016 (reading questions)</p> <p><b>Discussion Board question for CITES guest speaker due THURSDAY</b></p>	<p>CB Class 15 – <b>Innovative finance for conservation</b></p> <p><b>Reading on wilderness management</b>, Glicksman 2014 (<b>reading questions</b>)</p> <p><b>Take Home #1 due FRIDAY.</b></p>

WEEK 9	Mon 3/10	Wed 3/12
Content	CB Lecture 16 - <b>Adaptive management</b>	CB Lecture 17 – <b>One Health &amp; Zoonosis</b>
Readings	Ch 16.2 Mensurative and manipulative experimental design; Birge 2016; Holling & Meffe 1996; Smith 2011; Australia NES 2013	Ch 3.6; Kolby 2020; Karesh 2012; Johnson 2020; Fox-Skelley 2020; Bernstein 2022; Conservation Through Public Health ( <a href="https://ctph.org/">https://ctph.org/</a> )
Class / Assignment	CB Class 16 – <b>Case study: Survival of the Australian biome regarding Matters of National Environmental Significance</b> (discussion)  <b>Readings on adaptive management</b> , Holling & Meffe 1996 ( <b>reading questions</b> )	CB Class 17 – <b>Wildlife Health</b> ( <b>guest speaker: Michelle Benavidez Westrich, Indiana DNR, confirmed</b> )  <b>Midsemester Paper, submit to Canvas by midnight FRIDAY (March 14)</b>

**SPRING BREAK (March 16 – March 23)**

WEEK 10	Mon 3/24	Wed 3/26
Content	CB Lecture 20 – <b>Invasive Species</b>	CB Lecture 21 – <b>Human-wildlife conflict</b>
Readings	Ch. 7; Sagoff 2020; Cuthbert 2020; Cristescu 2018; Oldham 2020; Doyle 2021b	Ch. 13; Schell 2020; Gross 2010; Leong 2020; Marquet, 2017
Class / Assignment	CB Class 18 – <b>Tools Training: Collective Impact</b> , a model for cross-sector collaboration on complex multi-scale issues, such as invasive species.	CB Class 19 – <b>Participating in the CITES convention as a country representative &amp; report from the North American Wildlife and Natural Resources Conference</b> ( <b>guest speaker: Glen Salmon, Indiana DNR, retired, IU SPEA, confirmed</b> ).
WEEK 11	Mon 3/31	Wed 4/2
Content	CB Lecture 22 – <b>Direct intervention</b> (captive propagation, reintroduction, translocation, assisted colonization)	CB Lecture 23 – <b>Disaster Management</b>
Readings	Ch. 15; Snyder 1996; Iverson 2013; IUCN 2013; Ferri 2022	Ch. 14; Bell 2020; Millar 2007; Greenberg 2023
Class / Assignment	CB Class 20 – <b>Mid-semester in person presentations</b> (first quarter of class, alphabetically)  <b>Captive breeding</b> , Snyder 1996 ( <b>reading questions</b> )	CB Class 21 – <b>Mid-semester presentations</b> (second quarter of class, alphabetically)  <b>Alternative Activity -- Wildlife in Disasters: Community Planning</b> (workshop)  <b>FEMA Course IS-11.A, Lesson 3 ONLY</b> ( <b>prepare for class exercise; not submitted as an assignment</b> )

WEEK 12	Mon 4/7	Wed 4/9
Content	CB Lecture 24 - <b>Private lands</b>	CB Lecture 25 - <b>P/Reserve Design</b>
Readings	Ch. 13; van Eeden 2006; Rutter 2020; Fletcher 2021; Xie 2024; Fisk 2024; Werdel 2024	Ch. 14; Griffith 2009; Cape Floristic example (pp 529-532 only); Schneider 2011
Class / Assignment	<p>CB Class 22 – <b>Indigenous languages and environmental knowledge</b> (guest speaker: <b>David Stringer, IU Associate Professor, Second Language Studies, confirmed</b>)</p> <p><b>What can we learn from indigenous ecological knowledge</b>, Unuigbo 2023</p> <p><b>Indigenous knowledge and the shackles of wilderness</b>, Fletcher 2021 (reading questions)</p> <p><b>Sciences of Consent: Indigenous Knowledge, Governance Value, and Responsibility</b>, Whyte 2020</p> <p><b>Evolving wildlife management cultures of governance through Indigenous Knowledges</b>, Fisk 2024 (co-management case studies – wolves, seas, fire)</p>	<p>CB Class 23 – <b>Tools Training: Interest Based Negotiation for stakeholder agreement on Reserve Design</b> (role play)</p> <p><b>Reading on Cape Floristic example</b> (pp. 529-532 only; reading questions)</p> <p><b>End-of-Semester Paper Proposal</b> - Outline &amp; 5-item bibliography <b>due FRIDAY</b></p>
WEEK 13	Mon 4/14	Wed 4/16
Content	CB Lecture 26 - <b>Scenario planning for landscape conservation</b> (Fradkin, 2017; 50-minute video – <i>not an instructor lecture</i> )	CB Lecture 27 – <b>Evaluating programs</b>
Readings	Ch. 11; Margoluis 2013	Ch. 15.4; Kleiman 2000; Ferraro & Pattanayak 2006; Wild 2023
Class / Assignment	<p>CB Class 24 – <b>Tools Training: Miradi planning tools for conservation - Results Chains</b> (workshop with <b>assignment due Friday</b>)</p> <p><b>Assignment - Results Chain (due Friday)</b></p>	<p>CB Class 25 – <b>Tools Training: Logic Models for program design and evaluation</b> (instructor-led exercises)</p> <p><b>Reading on evaluating investments</b>, Ferraro 2006 (reading questions)</p> <p><b>Discussion Board question</b> for Indianapolis Zoo guest speaker <b>due THURSDAY</b></p>

WEEK 14	Mon 4/21	Wed 4/23
Content	CB Lecture 28 - <b>Valuing resources</b>	CB Lecture 29 – <b>Advocacy for nature and people</b> (science & policy advocacy, diversity, equity & inclusion, ethics)
Readings	Ch. 15; Camara-Leret 2021; De Valck & Rolfe 2019; Schwindt 2003 (reading questions); Cantor 2023	Ch 14; Bateson 2021; Novak 2018; WildAid.org; Garrard 2015 (reading questions); Arismendi 2016; Crandall 2021; King 2023; Salmon People (26-minute film)
Class / Assignment	<p>CB Class 26 – <b>International Collaboration</b> (guest speaker: Samuel Ivande, Bird Conservation Coordinator, Global Center for Species Survival, Indianapolis Zoo, confirmed)</p> <p><a href="#">State of the World's Birds, 2024 Update</a>, Data Zone, BirdLife International (website).</p> <p><b>Reef valuation</b>, De Valck 2019 (reading questions)</p>	<p>CB Class 27 – <b>Tools Training: Structured Decision Making (SDM) for Salmon People: A Native Fishing Family's Fight to Preserve a Way of Life</b> (26-minute film)</p> <p><b>Reading on advocacy</b>, Garrard 2015 (reading questions)</p> <p><b>Advocating for professional diversity</b>, Arismendi 2016; Crandall 2021; King 2023 (discussion)</p> <p><b>End-of-semester paper due FRIDAY</b></p>
WEEK 15	Mon 4/28	Wed 4/30
Content	No lecture	No lecture
Readings	No readings	No readings
Class / Assignment	<p>CB Class 28 – <b>End-of-semester in person presentations</b> (third quarter of class, alphabetically)</p> <p><b>Please complete the course evaluation!</b></p>	<p>CB Class 29 – <b>Remaining End-of-semester presentations</b> (last quarter of class)</p> <p><b>Course Review</b> (discussion)</p> <p><b>There is no final exam for this class.</b></p>

**SAVE PAPERS AND ASSIGNMENTS UNTIL FINAL GRADES ARE ASSIGNED.**

**Assignments to submit on Canvas by midnight of the due date:**

- Jan 13:** Top Hat Registration (complete before first class on campus)
- Jan 14:** Initial Survey; Accessibility Acknowledgment; Discussion Board to introduce yourself
- Jan 14:** Reading Questions on Palumbi 2009 ocean biodiversity
- Jan 16:** Discussion Board on biodiversity hotspots (post Thurs, respond Sunday)
- Jan 21:** Reading Questions on Kelt 1996 desert mammals
- Jan 24:** Quiz #1 on biodiversity concepts
- Jan 26:** Reading Questions on Eyre 2012 vertebrate surveys
- Jan 28:** Reading Questions for Mitchell 2010 sex determination in tuataras
- Jan 31:** Quiz #2 on Assessment & Demography
- Feb 2:** Reading Questions on Cancino 2010 antelope PVA
- Feb 2:** Vortex Training exercises & software download (prepare for guest instructor)
- Feb 7:** Horizons Scan (1-page brief)
- Feb 9:** Reading Questions on Fox 2008 hybrid species
- Feb 11:** Reading Questions on USFWS 2007 polar bears
- Feb 12:** Armed Conflict class activity upload after class
- Feb 13:** Guest speaker question on climate adaptation research (Desi Robertson, CASCs)
- Feb 14:** Vortex #1 assignment
- Feb 18:** Reading Questions on Franklin 2002 fragmentation
- Feb 18:** Reading Questions on Turner 2001 landscape ecology
- Feb 20:** Guest speaker question on Law Enforcement (Alexander Silva, US FWS)
- Feb 21:** Vortex #2 assignment
- Feb 23:** Reading Questions on Laurance 2002 Amazon metapopulations
- Feb 23:** Reading Questions on Haddad 2015 global forest fragmentation
- Feb 27:** Guest speaker question on CITES (Glen Salmon, Indiana DNR, retired)
- Feb 28:** Midsemester Paper Proposal (narrative outline with bibliography)
- March 2:** Reading Questions on Nowak 2016 CITES
- March 2:** Reading Questions on Glicksman 2014 Multiple use agencies
- Mar 7:** Take Home #1
- Mar 9:** Reading Questions on Holling & Meffe 1996 adaptive management
- Mar 14:** Midsemester paper (with bibliography)
- Mar 30:** Midsemester presentation due (recorded or in-person, first half of class by last name)
- Mar 30:** Reading Questions on Ferraro 2006 evaluating investments
- April 3:** Guest speaker question on Indigenous Knowledge (David Stringer, IU Second Language Studies)
- Apr 11:** End-of-semester Paper Proposal (narrative outline with bibliography)
- Apr 8:** Reading Questions on Cape Floristic example (pp. 529-532)
- Apr 15:** Reading Questions on Ferraro 2006 evaluating investments
- Apr 17:** Guest Speaker Question on International Collaboration (Samuel Ivande, Indianapolis Zoo)
- Apr 18:** Results chains in Miradi format
- Apr 20:** Reading Questions on De Valck 2019 reef valuation
- Apr 22:** Reading Questions on Garrard 2015 advocacy
- Apr 25:** End-of-Semester Paper
- Apr 27:** End-of-Semester Presentation (recorded or in-person, second half of class)

**There is no final exam for this course.**

**Additional information:**

**Counseling and Psychological Services**

For information about services offered to students by CAPS:

<http://healthcenter.indiana.edu/counseling/index.shtml>

**Religious Observation**

In accordance with the Office of the Dean of Faculties, any student who wishes to receive an excused absence from class must submit a request form available from the Dean of Faculties for each day to be absent. This form must be presented to the course instructor by the end of the second week of this semester. A separate form must be submitted for each day. The instructor will fill in the bottom section of the form and then return the original to the student. Information about the policy on religious observation can be found at the following

website: <https://policies.iu.edu/policies/aca-59-accommodation-religious-observances/index.html>

**Disability Services for Students**

Securing accommodations for a student with disabilities is a responsibility shared by the student, the instructor and the DSS Office. For information about support services or accommodations available to students with disabilities, and for the procedures to be followed by students and instructors: <https://studentaffairs.indiana.edu/student-support/disability-services/index.html>

**Sexual Harassment**

As your instructor, one of my responsibilities is to help create a safe learning environment on our campus. Title IX and our own Sexual Misconduct policy prohibit sexual misconduct. If you have experienced sexual misconduct, or know someone who has, the University can help.

If you are seeking help and would like to talk to someone confidentially, you can make an appointment with:

- i. The Sexual Assault Crisis Service (SACS) at 812-855-8900
- ii. Counseling and Psychological Services (CAPS) at 812-855-5711
- iii. Confidential Victim Advocates (CVA) at 812-856-2469
- iv. IU Health Center at 812-855-4011

For more information about available resources:

<http://stopsexualviolence.iu.edu/help/index.html>. It is also important to know that federal regulations and University policy require me to promptly convey any information about potential sexual misconduct known to me to our campus' Deputy Title IX Coordinator or IU's Title IX Coordinator. In that event, they will work with a small number of others on campus to ensure that appropriate measures are taken and resources are made available to the student who may have been harmed. Protecting a student's privacy is of utmost concern, and all involved will only share information with those that need to know to ensure the University can respond and assist. I encourage you to visit <http://stopsexualviolence.iu.edu/help/index.html> to learn more.

**Commitment to Diversity: Find your home and community at IU**

**Asian Culture Center**

Address: 807 East Tenth Street, Bloomington, IN 47408

Phone: 812-856-5361

Email: [acc@indiana.edu](mailto:acc@indiana.edu)

Website: <https://asianresource.indiana.edu/index.html>

**First Nations Educational & Cultural Center**

Address: 712 E 8th St., Bloomington, IN 47408

Phone: 812-855-4814

Email: [fnecc@indiana.edu](mailto:fnecc@indiana.edu)

Website: <https://firstnations.indiana.edu/contact/index.html>

**Jewish Culture Center**

Address: 730 E 3rd St., Bloomington, Indiana 47401

Phone: 812-336-3824

Website: <https://iuhillel.org/iu-jewish-culture-center>

**LGBTQ+ Culture Center**

Address: 705 E 7th St., Bloomington, Indiana 47408

Phone: 812-855-4252

Email: [glbtserv@indiana.edu](mailto:glbtserv@indiana.edu)

Website: <https://lgbtq.indiana.edu/contact/index.html>

**La Casa Latino Culture Center**

Address: 715 E 7th St., Bloomington IN, 47408

Phone: 812-855-0174

Email: [lacasa@indiana.edu](mailto:lacasa@indiana.edu)

Website: <https://lacasa.indiana.edu/>

**Neal Marshall Black Culture Center**

Address: 275 N Jordan Ave Bloomington, Indiana 47405

Phone: 812-855-9271

Email: [nmgrad@indiana.edu](mailto:nmgrad@indiana.edu)

Website: <https://blackculture.indiana.edu/index.html>

**Emergency Food Relief**

If you find you are in need of food and do not have the resources to purchase it, please consider utilizing the emergency food relief system on campus and in the community. The following units/agencies are here to assist with food relief:

- *Crimson Cupboard*: <https://studentaffairs.indiana.edu/student-support/crimson-cupboard/index.html>
- *Emergency Meal Project @ IU*: <https://www.dining.indiana.edu/news-updates/emergency-meal.html>
- *Mother Hubbard's Cupboard Food Pantry*: <https://www.mhcfoodpantry.org/>



- *Other pantries:* <https://www.foodpantries.org/ci/in-bloomington>

### **Emergency Funding**

For emergency funding issues, please visit the Student Advocates Office (SAO) [website](#). For additional concerns not covered by the SAO, apply for funding from the O'Neill School [here](#).

### **Requesting Letters of Recommendation**

In the years ahead, many of you will request letters of recommendation to accompany job applications and applications to graduate schools (yes, some of you will return to school). If you are applying for a job, letters from other employers are helpful, but letters from faculty members can help, too. Faculty members can discuss your general intelligence, your thoughtfulness, your ability to work on a team, your writing and communication skills, the general strengths of the academic program you completed, etc. If you are applying to graduate schools, most of your letters should be from faculty members. Letters of recommendation can be immensely helpful, or they can be nearly useless, and you can influence the outcome. Effective letters give detailed, specific information about you and your education. Most letters these days are sent electronically, but occasionally dead-tree letters are still needed.

The nicest things you can do for someone who is writing you a letter or serving as a reference are:

- Remind us what class you took, when. Hopefully we remember you, but if you had a reasonable record in our class, we can write helpful letters even if you were one of 200 students (although your professors in smaller classes may be able to write more insightful letters).
- Give us at least two weeks' notice or apologize for giving less.
- Make sure we know when the letter is due and provide the program name (including what degree if it's for grad school) and an address so we can create a proper letter.
- Give us an updated résumé so we can see what you've done with your life.
- Give us a copy of the job description so we know what's important.
- Give us a copy of your cover letter. Your cover letter is where you sell yourself, and it helps us immensely to know what you are claiming for yourself, and how you are pitching yourself. We don't need envelopes – we'll use letterhead for print letters - it's expected at SPEA.
- Be aware that some of the employers and graduate school people are our colleagues. Help us to write letters that all of us can be proud of - we don't like to write useless letters any more than you appreciate having them written. If you have a skeleton in your closet (perhaps poor grades in your early years at school) that you plan to address, and we have information that you've improved your record since then, tell us that that's an issue. In general, if we've agreed to write for you, or to be contacted in some way, we're on your side - let us know what would be helpful.
- If you think you'll be asking for additional letters in the future, let us know, and ask us to keep your information on file.
- Ask, gingerly, if we'd like a reminder a few days before the letter is due (assuming you've given us more than a few days). Some of us are more busy/scattered/absent-minded than others, and often a reminder is appreciated. Assume that I want a reminder.

***For your own sake, save particularly good papers and memos.*** Some employers and academic programs want to see proof of writing skills. Even if they don't ask for it, enclosing a sample of a really good memo or brief may make a difference to an employer who has listed communication skills, but didn't think to ask for examples - you've demonstrated that you understand what the employer is looking for, and you've gone the extra mile to prove you have the skill. Good luck!