**Principles of Wildlife Management**

**RNR 2031/2072: Fall 2020**

**Lecture: Mon/Wed/Fri 8:30-9:20 in RNR room 141**

**INSTRUCTOR: Dr. Kevin Ringelman**

Office: 340 RNR

 Office Hours: virtual, by appointment

 Email: kringe2@.lsu.edu

**ZOOM LINK:** <https://lsu.zoom.us/j/4355331566>

**COURSE DESCRIPTION AND GOALS**

The goal of this course is to provide you with a foundational knowledge of North American wildlife management that you will continue to build on during your undergraduate career and beyond. We will cover the history, ethics, and philosophical development of wildlife management. We will also discuss the theoretical and practical application of management principles to both populations (which will require some math) and their habitats, as well as discuss current and future threats to wildlife.

This class will provide you with a background in:

* The history, ethics, and politics of managing wildlife.
* Foundational theory in population regulation and its modern application in management.
* The practicalities and challenges associated with on-the-ground wildlife management.
* Reading and critically discussing primary scientific literature and broader media.
* Scientific writing and the peer-review process.

**COVID-19 POLICIES**

* Face coverings or masks that completely cover the mouth and nose are mandatory in the classroom. Face covers or masks will not be provided by LSU. Students are responsible for providing their own face covers or masks. Students who do not follow the mandatory face cover or mask requirement will not be permitted to enter the classroom, resulting in an unexcused absence and 0 for any in-class assignments.
* LSU strongly encourages all students, faculty and staff to get vaccinated for COVID-19. Visit [www.lsu.edu/roadmap/vaccines/](http://www.lsu.edu/roadmap/vaccines/) to learn how to get vaccinated on campus. Vaccination helps keep our campus community safe, helps protect those among us who are most vulnerable to COVID-19, and is our path back to more normal operations and the full college experience that our students deserve. If you have already been vaccinated, thank you!

**READINGS:**

* As assigned. Please do the reading. It’s not a lot.

**GRADING:**

**A+ (97­.00–100); A (93.00–96.99); A- (90.00–92.99); B+ (87.00–89.99); B (83.00–86.99);**

**B- (80.00–82.99); C+ (77.00–79.99); C (73.00–76.99); C- (70.00–72.99); D+ (67.00-69.99);**

**D (63.00–66.99); D- (60.00–62.99); F (<60.00)**

100 each 2 midterm exams

25 Paper outline

50 Paper 1st draft

40 Peer reviews

100 Final paper

150 Final exam

100 Homework (approximate)

50 Readings and Quizzes (approximate)

715 *(may vary slightly based on homeworks and quizzes)*

**Make-ups:** To be eligible for to make up a quiz or exam, please contact me with a legitimate excuse before the end of class that day. I understand that COVID-19 may require flexibility in this regard.

**Re-grades:** Must be submitted within one week after exams are returned. The entire test will be re-graded; that is, there is the potential to both gain and lose points.

**Late work:** Unexcusedlate assignments will lose 10% per 24-hour period. Just to be clear, late assignments are all assignments turned in after the posted deadline, whether that is 3 minutes or 3 days. I understand that COVID-19 may require flexibility in this regard.

**TERM PAPER**

You will be required to write a term paper for this class. You will have to turn in an outline, your first draft halfway through the semester, and a final draft near the end of class. **The various components of this paper are worth >1/3 of your class grade.**

The three pillars of wildlife management are the animals, their habitat, and the people who have a stake in those resources. There are several classic case studies that showcase the complex interaction of these forces (see below). In your paper, you will write about the management of your chosen system as a dynamic and integrative decision based on the needs of animals, their habitats, and stakeholders.

**Format**

Double-spaced, Times New Roman 12 point font with 1” margins

Citations follow Journal of Wildlife Management (see below)

Length requirement *excludes* literature cited and headers

|  |  |  |
| --- | --- | --- |
| **Outline** | **First Draft** | **Final Draft** |
| Due 08:30 on 10/11 | Due 08:30 on 11/8 | Due 08:30 on 12/3 |
| Should outline all main paragraphs | 2000 words | 2000 words |
| Must list >5 publications | Must cite ≥10 publications | Must cite ≥10 publications |

Turning in an incomplete paper will result in a lower baseline grade (e.g., 1500 word first draft = max grade of 75%)

**Grading (25 points outline, 50 points first draft, 100 points final draft)**

**You will be graded on:**

 Introduction, placing the issue in context

 Animal issues (e.g., populations, life-history, ecology)

 Habitat issues (e.g., connectivity, multiple uses, ownership)

 People issues (e.g., politics, economics, stakeholder interests)

 Overall integration of these concepts, current status, future outlook

 Style, clarity, flow

 Citations

**Peer review**

Peer review is an integral part of the scientific publication process. When you turn in your first draft, I will distribute it to several of your peers for review. You, in turn, will receive three papers *on different topics* to review. You will use the comments and “track changes” functions in Microsoft Word to review the papers.

**For each review you complete, you can receive up to 20 points (40 total points)**,

based on the quality of your review (see below). You may comment on content, structure, organization, grammar, etc. “Bigger picture” reviews that address whether the author is providing the right information with the right organization structure tend to be most helpful (as opposed to correcting grammar and syntax).

Excellent (A+, A, A-) – Provided thorough feedback on clarification, alternative phrasing, identified strong and weak sections, and provided insightful assistance to improve overall organization and style. Review will lead to substantial improvement in the paper.

Good (B+, B, B-) – Provided some feedback, and offered assistance to improve parts of the paper. Review will lead to improvement of the paper.

Fair (C+, C, C-) – Provided minimal feedback on overall structure and organization, assisted with some phrasing and style issues. Review was too vague to be more than marginally useful.

Poor (D+, D, D-, F) – Offered a few minor suggestions.

*\*\*\*\*\* Plagiarism will not be tolerated. \*\*\*\*\**

*It is your responsibility to know what constitutes plagiarism.*

**Topics**

Reintroductions and predator-prey dynamics in Yellowstone

Klamath Basin water wars

Conservation and management of the Northern Spotted Owl

 DDT and the early environmental movement

 Decline and recovery of the American Alligator

 Petroleum extraction and wildlife conservation

*I have chosen these topics for a reason, but if you identify an alternative topic, I’ll consider adding it to the list. You must consult with me before choosing a different topic.*

Citations will follow the format of the Journal of Wildlife Management. Here are a couple examples, and you can learn more on the JWM website (under guidelines for authors):

Book – general format

McCullough, D. R. 1979. The George Reserve deer herd: population ecology of a K-selected species.

 University of Michigan, Ann Arbor, USA.

Journal – general format

Miller, M. R. 1986. Molt chronology of northern pintails in California. Journal of Wildlife Management

 50:57–64.

**Honors Section (RNR 2072)**

Students enrolled in the honors section of this course (2072) must perform all of the work associated with the regular 2031 section. Additional graded work for the honors section potentially includes additional (advanced) readings from the primary literature, and supplemental writing and presentation assignments. As per credit expectations, honors students can anticipate an additional 2-3 hours per week of reading and homework.

**UNIVERSITY POLICY STATEMENTS**

**Attendance:** LSU policy statements 22 and 24 and Faculty Senate resolution 12-3 state that individual faculty determine excuse and unexcused absences, and that attendance can be graded by randomly taking attendance during 12 randomly selected lectures. An unexcused absence during any graded activity will result in a 0 for the activity. Excused absences and make-up opportunities will be granted for university-approved off-campus activities, religious holidays, professional development activities, job interviews, and severe illnesses. Please contact me before course activities if possible to schedule a make-up.

**Academic integrity:** Cheating and plagiarism will not be tolerated in any form; it damages the integrity of the student, the department, and university, and can far-reaching effects into the future (e.g. “I don’t hire RNR grads anymore because I had one who cheated his (her) way through and was an awful employee”). We use plagiarism detection software. Students violating the Academic Dishonesty policy of the LSU Code of Student Conduct will be referred to Student Advocacy & Accountability.

**Disability statement:** Louisiana State University is committed to providing reasonable accommodations for all persons with disabilities. The syllabus is available in alternate formats upon request. If you have a disability that may have some impact on your work in this class and for which you may require accommodations, please see a staff member in Disability Services (115 Johnston Hall) so that such accommodations can be considered. Students that receive accommodation letters, please meet with me to discuss the provisions of those accommodations as soon as possible.

**Credit expectations:** For each earned credit, students must spend a minimum of 1 hour per week in lecture class or 3 hours per week in lab, and a minimum of 2-3 hours per week of studying/homework outside of class. **That means, for this class, expect between 6-9 hours of homework each week.**

**Week 1**

8/23 – Introduction

 8/25 – Prehistoric extinctions

 8/27 – Modern overexploitation (Readings: McIlhenny)

**Week 2**

 8/30 – NO CLASS – HURRICANE IDA

 9/1 – NO CLASS – HURRICANE IDA

 9/3 – NO CLASS – HURRICANE IDA

**Week 3**

9/6 – NO CLASS – Labor Day

 9/8 – NO CLASS – Kevin sick

 9/10 – Conservation beginnings

**Week 4**

9/13 – Discussion: Conservation vs. preservation (Readings: Nash, Muir)

 9/15 – Foundations of game management, funding legislation (Readings: Kessler)

 9/17 – Transition to non-game wildlife

**Week 5**

9/20 – Introduction to population dynamics (**Quiz 1**)

 9/22 – The North American Model of Wildlife Management (Assign math homework 1)

 9/24 – The role of hunting

**Week 6**

9/27 – Harvest and sustainable yield (**Math HW 1 due**) (Assign math homework 2)

 9/29 – Discussion: Serfass reading and Exam 1 review (**Math HW 2 due**)

 10/1 – Exam 1

**Week 7**

10/4 –Population estimation Bret covering

 10/6 – Writing, survival estimation (**Assign math homework 3**) Bret covering

 10/8 – Bret covering

**Week 8**

10/11 – (**paper outline due**) Bret covering

 10/13 – Leslie matrices

 10/15 – Nutrition and water

(**math HW 3 due**)

**Week 9**

10/18 – Habitat management (Dr. Long) Kevin SEAFWA

 10/20 – NO CLASS Kevin SEAFWA

 10/22 – NO CLASS – Fall Break

**Week 10**

10/25 – Habitat use (**Quiz 2**)

 10/27 – Reserve design and conservation planning

 10/29 – Island biogeography (assign biogeography homework)

**Week 11**

11/1 – Habitat loss

(**biogeography HW due**)

 11/3 – Integration – waterfowl as case study

 11/5 – Exam 2

**Week 12**

11/8 – Overpopulation and nuisance species

 11/10 – Invasive species

(**paper draft due**; assign peer reviews)

 11/12 – Discussion commercial deer harvest (papers on moodle)

**Week 13**

11/15 – Feral cats

 11/17 – Drones

 11/19 – NO CLASS – Kevin gone

**Week 14**

11/22 – Discussion: racism in wildlife (Purdy, Lanham, Hall)

 11/24 – NO CLASS – Thanksgiving

 **Peer reviews due at 8:30 a.m.**

 11/26 – NO CLASS – Thanksgiving

**Week 15**

11/29 – Parasites and disease

 12/1 – Extractive industry

 12/3 – Integration and review

 **(final paper due; no late penalty through Dec. 6 at 8:30 a.m.)**

**Friday 12/10 – FINAL EXAM – 07:30-09:30**