EFB 493/693—Management of Wildlife Habitats and Populations, M, W, F 9:30-10:25, Online

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Course Schedule:

Date	Lecture Topic	*Readings*	Assignments Due	Labs
8/24	Introduction			Library Information (Casey Koons)
8/26	Origins of wildlife conservation in the US – Paper discussion	•*Leopold. 1933. Chapter 1: A history of ideas in game management.* •*Kirkpatrick and Turner. 1997. Seven stages of grief.*		
8/28	Management planning		Mgmt Group Assigned	
8/31	Planning continued	*LABOR DAY*		**Fieldwork Intro (online)**
9/2	Adaptive management – paper discussion	•*Parma et al. 1998. What can adaptive management do for our fish, food and biodiversity?*		
9/4	Structured Decision Making			
9/5				
9/7	Niche and Habitat			**Lab 1**: Introduction to ArcGIS 10
9/9	Habitat evaluation	• *Porter. 1992. Habitat analysis and assessment.*		
9/11	Habitat evaluation planning	•*Anderson and Gutzwiller. 2005. Habitat evaluation methods.* •*Higgins et al. 2005. Vegetation sampling and measurement.*	Habitat Requirements (**G**)	
9/14	Review of population dynamics		BRING YOUR VARIABLES TO LAB!	**Lab 2:** ArcGIS and Habitat Assessment

9/16	Basic Population Models			
9/18	Yield			
9/21	Open access harvest: basic economic model		Habitat Variables & HSI models (**G**)	**Lab 3:** Bobcat reintroduction and harvest
9/23	Less Basic Population Models			
9/25	Less Basic Population Models cont.		Hab. Req. Rewrite (**G**)	
9/28	Field Meeting			No Lab:
9/30	No Class - Fieldwork		Lab 2 Report (**G**)	Fieldwork
10/2	No Class - Fieldwork			
10/5	Complex Timelines		Lab 3 Worksheet (**I**)	**Lab 4:** Deer Management
10/7	Age-structured populations and Leslie Matrix modeling			
10/9	Fertility Control	*Brian Underwood, USGS Patuxent Willdife Research Center*		
10/12	Density dependence and Leslie matrix modeling		Meet with TA for pre-progress report	**Lab 5:** Leslie Matrix Modeling
10/14	Limits to Growth	•*Caughley and Sinclair. 1994. Animals in populations.*		
10/16	Alt. Density Dependence		Lab 4 Worksheet (**I**)	
10/19	Integrating HSI and Population Management		Mgmt Plan Progress Report 1 this week (**G**)	**Lab 6:** Integrating HSI and Population
10/21	Fitting Models to Data			
10/23	Natural regulation and elk management – paper discussion Management	•*Chase. 1987. Playing God in Yellowstone. Parts I, II, III, and IV.* •*Smith et al. 2003. Yellowstone after wolves.*	Lab 5 Report (**G**)	
10/25	Discussion (maybe)			
10/26	Life History and Population Cycles			

10/28	Monitoring Habitat and Populations			**Lab 7:** Model Fitting (no report)
10/30	Monitoring and Adaptive Management			
11/2	Management Plan presentation review	Management Plan/Presentation Review	*Meet with T.A. for pre-progress report*	**LAB 8:** Adaptive Management (no report)
11/4	Furbearer Management in New York	*Tim Pyszczynski, NYSDEC*		
11/6	Endangered Species Management	*Robyn Niver, USFWS*	Lab 5 Rewrite Due	
11/8	Maybe Progress Rept			
11/9	Exam Review		Mgmt Plan Progress Report 2 this week (**G**)	Progress Report 2
11/11	Exam pt. 1			
11/13	Exam pt. 2			
11/16	Rehearsal			Wildlife Major Exit Exam, Course Evaluations (REQUIRED)
11/18	Mgmt Plan Presentations	*Groups 1&5*		
11/20	Mgmt Plan Presentations	*Groups 2&6*		
11/23	Mgmt Plan Presentations	*Groups 3&8*		THANKSGIVING
11/25	No Class			
11/27	No Class			
11/30	Mgmt Plan Presentations	*Groups 4&7*		FINALS WEEK
12/2	Mgmt Plan Presentations	*Groups 9&10*		

Grading:

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Assignment	Due Date	% of Grade	pts
Habitat Requirements (**G**)*	Sep. 11/rewrite Sep. 27	5.0	50
Habitat Variables and HSI models (**G**)	Sep. 21	1.0	10
Lab 1: ArcGIS Basics (**I**)	End of lab	1.0	10
Lab 2: ArcGIS and Habitat Assessment (**G**)	Sep. 30	2.5	25
Lab 3: Furbearer Harvest (**I**)	End of lab	2.5	25
Lab 4: Deer Management (**I**)	Oct. 16 (worksheet)	2.5	25
Lab 5: Leslie Matrix Models (**G**)	Oct. 23	2.5	25
Mgmt Plan Progress Report 1 (**G**)	Oct. 19 – 23	4.0	40
Lab 6: HSI and Population Models (**G**)	End of lab	2.5	25
Mgmt Plan Progress Report 2 (**G**)	Nov. 9 – 13	4.0	40
Lab 7: Fitting models to data (**I**)	End of Lab	2.5	25
Lab 8: Adaptive Management (**I**)	End of Lab	2.5	25
Mgmt Plan Presentation and Report (**G**)	Nov. 18 – Dec. 2	30.0	300
Written Exam (**I**)	Nov. 11 and 13	25.0	250
Quiz 1 (**I**)	TBA	2.5	25
Quiz 2 (**I**)	TBA	2.5	25
Quiz 3 (**I**)	TBA	2.5	25
Participation	Whole semester	5.0	50
TOTAL		**100.0**	**1000**

This is a group-project oriented course. You will be evaluated by your group at the end, which can affect your grade. You're expected to participate with your group on writing assignments and in meetings outside of classtime.

Unless otherwise specified, all written assignments are due by 5 pm on the date listed and should be turned in via Blackboard.

* G = Group assignment, I = Individual assignment

ATTENDANCE POLICY: Attendance is mandatory at all lectures and labs. Students unable to make a lecture or lab session must inform the instructor or teaching assistant ahead of time. We will use both Zoom (for slides) and Blackboard Collaborate (for whiteboard and other interactions).

COVID-RELATED MATTERS: ESF-approved facial covering (masks, face shields) are required in labs and during any other class gatherings. All instruction in this class will be online synchronous. There will be a limited number of spaces for in-person instruction during lab, for those who have trouble connecting remotely to the Baker computers. Students or instructors who are experiencing symptoms of Covid-19 or who are awaiting test results should not come to any class-related gatherings in person.

Per SUNY ESF requirements, students must wear face masks or coverings while on campus. Failure to comply with this requirement will result in removal from the classroom for that in-person class session and an absence being recorded. Repeated failure to comply may result in a referral to the Division of Student Affairs. Individuals unable to wear a mask for medical reasons should contact the Syracuse University Center for Disability Resources.

STUDENTS WITH LEARNING AND PHYSICAL DISABILITIES
SUNY-ESF works with the Office of Disability Services (ODS) at Syracuse University, who is responsible for coordinating disability-related accommodations. Students can contact ODS at 804 University Avenue- Room 309, 315-443-4498 to schedule an appointment and discuss their needs and the process for requesting accommodations. Students may also contact the ESF Office of Student Affairs, 110 Bray Hall, 315-470-6660 for assistance with the process. To learn more about ODS, visit http://disabilityservices.syr.edu. Authorized accommodation forms must be in the instructor's possession one week prior to any anticipated accommodation. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

ACADEMIC DISHONESTY
Academic dishonesty is a breach of trust between a student, one's fellow students, and/or the instructor(s). By registering for courses at ESF you acknowledge your awareness of the ESF Code of Student Conduct (http://www.esf.edu/students/handbook), in particular academic dishonesty includes but is not limited to plagiarism and cheating, and other forms of academic misconduct. The Academic Integrity Handbook contains further information and guidance (http://www.esf.edu/students/integrity/). Infractions of the academic integrity code may lead to academic penalties as per the ESF Grading Policy: (http://www.esf.edu/provost/policies/documents/GradingPolicy.11.12.2013.pdf).

INCLUSIVE EXCELLENCE STATEMENT
As an institution, we embrace inclusive excellence and the strengths of a diverse and inclusive community. During classroom discussions, we may be challenged by ideas different from our lived experiences and cultures. Understanding individual differences and broader social differences will deepen our understanding of each other and the world around us. In this course, all people (including but not

limited to, people of all races, ethnicities, sexual orientation, gender, gender identity and expression, students undergoing transition, religions, ages, abilities, socioeconomic backgrounds, veteran status, regions and nationalities, intellectual perspectives and political persuasion) are strongly