

EFB 797: Concepts and Techniques in Spatial and Movement Ecology

Fall 2025 – 1 credit

INSTRUCTORS

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HOURS

Class Meetings

230-330pm

Bray 300

Office Hours

By Appointment

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PREREQUISITES

- Graduate Level Standing

COURSE DESCRIPTION

This course is a one-semester, one-credit seminar examining modern concepts in spatial and movement ecology. The goal of this seminar is to provide students with in-depth discussions of concepts important to the field and relevant to their own graduate work. This course will use a collegial discussion format to improve understanding of the underlying premises and applications of these methodological approaches.

LEARNING OBJECTIVES

- Exposure to modern analytical techniques applied in spatial and movement ecology
- Improved comfort discussing complex analytical techniques
- Improved ability to read and digest scientific literature
- Improved ability to describe spatial and movement ecology techniques in scientific writing

TEXTBOOKS & SUPPLIES

None: assigned reading material will be made available online.

GRADING

100-90% = A; 90-80% = B; 80-70% = C; <70% = F

- Attendance & Participation (40%)
- Leading Course Discussion (30%)
- Methods Section Writing (30%)

ATTENDANCE & PARTICIPATION

This course is primarily based on in-class discussions and participation. As such, it is crucial that you make every effort to attend each class meeting. If you must be absent, please consult with the instructor beforehand. Exceptions will be made within reason. As an alternative, if you cannot attend the class in-person, an online option will be made available via Zoom upon request. You will receive a score of *zero* for *Attendance & Participation* for any day in which you have an unexcused absence. If your absence is excused, you will receive *no score* for that day. Participation will also be gauged via required contributions to weekly discussion board prompts on Blackboard.

DISCUSSION LEADERSHIP

Each student is expected to lead a discussion during the semester. Students will be asked to sign-up for dates and topics during the first class period. Discussion leaders are responsible for arranging reading materials and a discussion board prompt with the instructor at least one week prior to the day they are leading to allow classmates a full week to review the assigned reading materials and respond to the prompt. On the day you are leading, you should come prepared with specific questions/talking points to make sure that the discussion of your topic is well-facilitated. Students will be assessed on the timeliness and effectivity of their leadership.

WRITING ASSIGNMENTS

Students will be expected to develop and submit the portion of a methods section focused on “Data Analysis” describing a proposed application of spatial or movement ecology techniques by the midpoint of the semester. This initial submission will be reviewed by the instructor and feedback will be provided. A revised version of the Data Analysis section will then be due by the end of the semester. This assignment does not apply to students concurrently enrolled in EFB 796: Techniques in Spatial and Movement Ecology; students with concurrent enrollment will instead complete a final project and presentation relevant to both classes.

JUSTICE, EQUITY, DIVERSITY, AND INCLUSION

As an institution, ESF embraces inclusive excellence and the strengths of a diverse and inclusive community. During classroom discussions, you may be challenged by ideas different from your own lived experiences and cultures. Understanding individual differences and broader social differences will deepen your understanding of each other and the world around you. In this course, all people (including, but not limited to, people of all races, ethnicities, sexual orientations, genders, gender identities and expressions, students undergoing transition, religions, ages, abilities, socioeconomic backgrounds, veteran status, regions and nationalities, intellectual perspectives, and political persuasions) will be encouraged to share their own perspectives and experiences. Hateful, discriminatory, derogatory, or otherwise unprofessional words or actions will not be tolerated.

RELIGIOUS OBSERVANCES

All students have a right under ESF policy to observe religious holidays of their choice, according to their individual faith. If students wish to observe a religious holiday, they should provide written notification to the instructor of their intent to observe a particular religious holiday prior to missing any required course meetings or activities. Reasonable requests for absence from course meetings or activities will be accommodated whenever possible. Please send your request to me directly by email.

LEARNING AND PHYSICAL DISABILITIES

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 or at 1-315-443-4498 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 or 1-315-470-6660 for assistance with the process. 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. By registering for courses at ESF you acknowledge your awareness of the ESF Code of Student Conduct, 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. Infractions of the academic integrity code may lead to academic penalties as per the ESF Grading Policy.

COURSE SCHEDULE

Date	Topic	Discussion Leader
8/25	Intro to Movement Ecology	Nate / Elie
9/1	<i>Labor Day</i>	<i>N/A</i>
9/8	Big Movement Datasets	Molly / Katie
9/15	Visual Observations of Movement Tracks	Ryan / Valentín
9/22	Home Range Estimation	Sagnik
9/29	Identifying Behaviors: Part 1	Maya
10/6	Identifying Behaviors: Part 2	Seanna
10/13	<i>Fall Break</i>	<i>N/A</i>
10/20	RSFs and SSFs	Rhia
10/27	Migration	Mia
11/3	Encounter Rates	Melinda
11/10	Biologgers	Jessica / Gabby
11/17	Movement Corridors	Jacob / Christian
11/24	<i>Thanksgiving Break</i>	<i>N/A</i>
12/1	Automated Radio Telemetry Systems	Madison / Matthew
12/8	Final Presentations	All Lab Students