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| **Day** | **Session** | **Activities** | **Preparation** |
| *Monday* | AM | * **Introductions**:   Mini-Presentations | Please come prepared with 2-3 slides to introduce yourself, your study system, your ecological questions, and a brief description of your data  Please also come with your data prepared to load into R Studio |
| PM | * **Lecture 1**: Visualizing and Summarizing Your Data in R, Complex Numbers * **In Class Exercise 1**: Visualize and summarize your data in R |  |
| *Tuesday* | AM | * **Monday Recap**: Share your results from In Class Exercise 1 * **Lecture 2**: Movement models in R (correlated random walk, discrete time, continuous time) | Please come prepared to briefly share your results from In Class Exercise 1 (visualization and summarization of your data) |
| PM | * **Lecture 3:** Segmentation Methods in R (first passage time, Lavielle, behavioral change point, Hidden Markov models) * **In Class Exercise 2:** Apply a movement model or segmentation method to your data |  |
| *Wednesday* | AM | * **Tuesday Recap**: Share your results from In Class Exercise 2 * **Lecture 4**: Home Range Analyses in R (MCP, KDE, AKDE) | Please come prepared to briefly share your results from In Class Exercise 2 (apply a movement model or segmentation method to your data) |
| PM | * **Lecture 5**: Environmental data annotation (rasters), Resource and Step Selection Functions in R * **In Class Exercise 3**: Apply a home range analysis, segmentation method, RSF, or SSF to your data |  |
| *Thursday* | AM | *Open Work Day: Apply the analyses you have learned to answer a research question about you data* |  |
| PM |
| *Friday* | AM | * James and Gustavo: Lectures on their work or special topics |  |
| PM | * **Final presentations**: Present your research findings from the week | Please come prepared to present (~10 min) on a small analysis of your data (Include 1-2 slides each introducing your study system and research question(s), describing your methods and analyses, your results, and the implications/discussion of your findings |