



Coding for Visualization in Ecology (Ecol 592)

	Ava Hoffman	Clif McKee	Very distinguished Prof.
Contact:	avamariahoffman@gmail.com	clifton.mckee@gmail.com	email
Office:	BIO 339		
Office Hours:	by appointment		

Course website: github.com/avahoffman/course.url...

Course Description: Careers using programming are growing fast, about 50% faster than other jobs [1]. This course aims to familiarize ecology students with several key programming languages/packages that will benefit them in graduate school and in their future careers. With a focus on visualization, students will take a goal-based approach to learning. After a brief introduction to the language or package, students will work on tangible products including:

- a resume or CV using L^AT_EX
- a project summary/outline using Markdown
- figure(s) using the student's own data in the R package ggplot
- a publicly visible code repository on GitHub using command line

Students will work in several-hour long chunks to cultivate a workshop-like environment conducive to questions and student teaching.

Prerequisites: Some familiarity with R or SAS; some data/project basis to work with; curiosity.

Credit Hours: 1

Course Objectives:

At the completion of this course, students will be able to demonstrate a tangible product based on their new coding knowledge.

Grade Distribution:

Based on final product produced and class attendance. Because sessions are long and limited in number, alternative assignments may be assigned for students who have to miss a session (eg., explore Shiny/knitr).

Tentative Course Outline:

Week	Content
Week 1	<ul style="list-style-type: none">• Something interesting• Reading assignment: Something interesting
Week 2	<ul style="list-style-type: none">• Something interesting• Reading assignment: Something interesting
Week 3	<ul style="list-style-type: none">• Something interesting• Reading assignment: Something interesting
Week 4	<ul style="list-style-type: none">• Something interesting• Reading assignment: Something interesting

[1] <https://www.burning-glass.com/research-project/coding-skills/>