Introduction to Animal Data Science

Course Objective: This course offers an introduction to modern data science skills needed for problem solving, data analysis, and communication. This is intended for animal science students with limited programming, scripting or data analytics experience.

Instructors:
Hao Cheng, Ph.D.
Assistant Professor of Quantitative Genetics
Department of Animal Science
Office: 2239 Meyer Hall
Phone: (530) 752-8163
Email: qtlcheng@ucdavis.edu

Class Times:
10:30am - 11:50am Monday and Wednesday at 1131 Meyer Hall.

Prerequisites:
A laptop is required.

Required Text:
No.

Expected Student Learning Outcomes:
Gain experience in the basic data science skills, including basic statistical concepts and methods, data wrangling, data visualization, machine learning, and program design. This course is meant to be flexible and adjust to the learning needs of students.

Course Schedule:

Week	Topic
1 - 2	basic statistical concepts and methods
3 - 4	data visualization
5	data wrangling
6-8	machine learning
9-10	application of data science in animal science

Assignments and Projects:
This course is primarily a hands-on experience and there will be no traditional exams. Instead, several projects and assignments will be assigned and graded.