Digital Agriculture Calendar Spring 2019

Month	Monday	Tuesday	Month	Tuesday	Wednesday
January	(14) Intro-Syllabus	(15) Beyond Excell-Vlab	March	(11) NN Implement	(12) ML Overview
	(21) R-Python	(22) Cloud Sharing		(18) Image Basics	(19) Image Basics
	(28) Files	(29) SQL Intro		(25) Image Analysis	(26) Image Analysis
February	(4) SQL Advanced	(5) ArcGis Intro	April	(1) Sensors HW10	(2) Time Series
	(11) ArcGis Advanced	(12) Overview Databases		(8) Statistics HW11	(9) Modeling
	(18) Intro to ML	(19) Basic Tools		(15) Spring Break	(16) Spring Break
	(25) SVM's	(26) NN intro		(22) Project Presentations	(23) Project Presentations
March	(4) Marti Gra!	(5) Marti Gra!		**Classes End**	

Databases:

- Beyond Excell: R, Python, SAS, ArcGis, Matlab
- Cloud Sharing: OneDrive, GoogleDrive, DropBox, Gitlab, GitHub, Multiple Collaborators
- Filetypes: Common file types, Structure protocols, Conforming
- SQL: Installing, Basic Operations
- ArcGis: Installing, Basic Operations

Basic Machine Learning tools:

- ML Introduction
- Basic Tools: Decision Trees, Random Forests
- Support Vector Machines: Intro, Implementation
- Neural Networks: Intro, Implementation
- Ensemble Techniques: Model Selection, Algorithms

Image Analysis:

- Image basics: Capturing, transfer, storage, pre-processing, compression, synthesis and security
- Image analysis: ImageJ, ArcGis,OpenCV,Imager

Data Analysis:

- Sensors: Time series analysis
- Statistics for Machine Learning
- Multi-linear Models
- Synthesis and Hypothesis testing on databases