Digital Agriculture Calendar Spring 2020

Month	Monday	Tuesday	Month	Tuesday	Wednesday
January	(13) Intro-Syllabus	(14) Beyond Excel - Vlab	March	(17) NN Implement HW7 Due	(18) Model Selection
	(20) MLK Day	(21) R HW1 Due		(23) Spring Break	(24) Spring Break
	(27) Databases –SQL HW2 Due	(29) Databases -SQL		(30) Image basics HW8 Due	(31) Imager
February	(3) No Class Conference	(4) No Class Conference	April	(6) OpenCV HW9 Due	(7) Image Analysis
	(10) ArcGIS- QGIS HW3 Due	(12) ArcGIS- QGIS		(13) Time series HW10 Due	(14) Time series
	(17) Python HW4 Due	(18) Python-ML Intro		(20) Statistics for ML	(21) Statistics for ML
	(24) Mardi Gra	(25) Mardi Gra		(27) Project Presentations	(28) Project Presentations
March	(2) Basic Tools HW5 Due	(3) SVM Implement		**Classes End**	
	(10) SVM Implement HW6 Due	(11) NN Implement			

Databases:

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

Basic Machine Learning tools:

- ML Introduction : Python
- 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: OpenCV, Imager

Data Analysis:

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