

AOM6735

Irrigation principles and management

ONLINE WITH CHAT SESSIONS

FALL SEMESTER

This course is for graduate students who are interested in developing efficient irrigation systems, working on irrigation systems or want to gain skills to evaluate an irrigation system, identify parts of a system, and develop an irrigation schedule based on system characteristics. This course is designed for non-engineers although quantitative ability will be required for calculations and analysis.



INSTRUCTOR: Dr. Haimanote Bayabil

EMAIL: hbayabil@ufl.edu

NEED TO KNOW: Students must be proficient in Microsoft Excel and Word. Students should be able to use equation functions and graphing functions in Excel. It is recommended that students have basic understandings of hydrology, unit conversions, and algebra.

What topics are covered in this course?

- Soil and water relationships (infiltration, soil moisture release curves).
- Components of the hydrologic cycle and how they can be measured or estimated.
- Evapotranspiration calculation process and modeling.
- Pros and cons of different irrigation systems and their function.
- Calculating irrigation rates, irrigation efficiency, and plant water use efficiency.
- Irrigation scheduling.