### SYLLABUS

## **INSTRUCTOR:** B. L. Stringam

**TEXT:** Hargreaves, G.H. and Merkley G.P. 2010. <u>Irrigation Fundamentals</u>, Water Resources Publications, LLC. (https://www.wrpllc.com/books/if.html)

**IMPORTANT DATES:** Midterm Exams: Feb 11<sup>th</sup>, Mar 18<sup>th</sup> and April 22<sup>nd</sup>; Final Exam: Monday May 2<sup>nd</sup> (8 - 10 am).

### **Course Topics:**

Irrigation Fundamentals Crop production factors Soil Water Relationships Water holding capacity **Irrigation Resources** ET using Hargreaves equation **Crop Water Requirements** Irrigation Scheduling Surface Irrigation Sprinkler System Bubbler Irrigation **Drip Irrigation** Pump efficiency Other Irrigation Methods **Pipe Flow Measurement** Open-channel flow measurement Drainage System management

**COURSE OVERVIEW**: This course will cover the fundamentals of irrigating crops. Participants will learn about common irrigation methods, the benefits and problems that are associated with each method, and how to evaluate the effectiveness of each method. Students will also learn about the principles of estimating water use and how to use this as a management tool.

**ATTENDANCE:** Attendance in lecture is strongly encouraged. If a student is borderline between letter grades, consideration will be given to class attendance and participation. The midterm examinations will be on Feb 11<sup>th</sup>, Mar 18<sup>th</sup> and April 22<sup>nd</sup>. If you will be out of town for an approved University activity on these days, please notify me *in advance* of the exam.

**QUIZZES AND EXAMINATIONS:** Examinations generally will be on the material covered prior to the exam. However, they will infer that you know previous material covered. Exams will be short answer, definitions, multiple choice and **calculations**. The final exam is a comprehensive exam covering the entire course. The midterms and final will be one-hour in length.

**ASSIGNMENTS:** The assignments will cover the quantitative aspects of soils (calculations). Similar problems will be on the quizzes and exams. All work, including conversions and proper units, must be shown with the answers in order to earn full credit.

GRADING: Three one hour exams @ 100 points each	300 pts.
Assignments and Reports	. 100 pts.
Term Assignment	. 50 pts.
Final Exam (8 - 10 pm May 2 <sup>nd</sup> )	100 pts.
TOTAL	450 pts.

Skeen N 330

# For information on Discrimination & Disability Accommodation, Academic Misconduct, Important Dates and Student Support Services use the following address.

https://provost.nmsu.edu/faculty-and-staff-resources/syllabus/policies.html

### Other NMSU Resources:

NMSU Police Department:	(575) 646-3311	www.nmsupolice.com
NMSU Police Victim Services:	(575) 646-3424	
NMSU Counseling Center:	(575) 646-2731	
NMSU Dean of Students:	(575) 646-1722	
For Any On-campus Emergencies:	911	