

COURSE OUTLINE

Course number and title: SOCR 371 – Irrigation of Field Crops

Credits: 1

Term(s) to be offered: Every Fall semester

Meeting times: M; 3:00 pm – 3:50 pm; Plant Sciences W212

Prerequisite(s): SOCR 370 Irrigation Principles (2 credits)

Course Description: Management of irrigation systems for field crops with emphasis on irrigation methods, irrigation scheduling, and strategies for water conservation.

Instructor: Dr. Allan A. Andales, Department of Soil and Crop Sciences
Consultation hours: Mondays, 9 – 11 a.m.; Thursdays, 1:30 – 3:30 p.m.
C106 Plant Sciences
Tel. (970) 491-6516
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Text(s): Class materials will be made available through Canvas.
<http://info.canvas.colostate.edu/login.aspx>

Course Objective(s):

- The student will understand the proper operation and management of different irrigation systems to maximize irrigation efficiency.
- The student will learn methods of conserving irrigation water or allocating limited water supplies.

Instructional Methodology: The class will meet once a week as a single group for discussions and field visits to see actual irrigation systems. Students will study modules on Canvas and will submit assignments to the instructor. Students will also be asked to work on a special project due on the last week of classes.

Methods of Evaluation:

Assignments:	80% of grade
Course project:	20% of grade
Total:	100%

Grading Scale:

Lower Cutoff, %	100.0	90.0	86.7	83.3	80.0	76.7	73.3	70.0	60.0	<60.0
Grade	A+	A	A-	B+	B	B-	C+	C	D	F

Academic Integrity: This course will adhere to the Academic Integrity Policy of the Colorado State University General Catalog and the Student Conduct Code. According to the policy, “academic integrity is conceptualized as doing and taking credit for one’s own work” (see <http://tilt.colostate.edu/integrity/>). To encourage an attitude of academic integrity, students will be asked to write an honor pledge on specified coursework.



Course Topics
SOCR 371 – Irrigation of Field Crops

<u>Module</u>	<u>Topic</u>
1	Introduction of course – Scope and expectations
2	Field trip (ARDEC: sprinkler and furrow systems)
3	Field trip (drip irrigation site)
4	Irrigation water requirements
5	Overview of irrigation methods
6	Furrow irrigation
7	Sprinkler irrigation
8	Microirrigation
9	Efficiency in Irrigation
10	Flow Measurement
11	Field trip (CSU Hydraulics Lab)
12	Irrigation scheduling
13	Course project (Fact Sheet)
14	Irrigation pumps
15	Irrigation Water Management

