

SYLLABUS
PART I
EDISON STATE COMMUNITY COLLEGE
AGR 151S INTRODUCTION TO AGRONOMY
4 CREDIT HOURS

COURSE DESCRIPTION

Introductory study of the basic principles and practices involved within the management, production, and development of field crops as well as soil and environmental sciences. Students will explore cultural and sustainability issues to crop production while utilizing scientific knowledge to make production decisions. Three hours of lecture integrated with two hours of lab activities each week. Lab fee.

COURSE GOALS

The student will:

Bloom's Level		Program Outcomes
1	1. Examine the size, scope, history, and key sectors of the agronomy industry.	3
2	2. Explain the importance of the developments in agronomy to the development of society.	9
1	3. Examine the basics of plant anatomy, genetics, and morphology.	3, 10
1	4. Identify the major components of soils and soil science.	3, 10
3	5. Discover the importance of soil fertility, fertilizers, and nutrient management.	3, 10
2	6. Discuss the hydrological cycle and the affects soil has on water management.	3, 10
3	7. Demonstrate knowledge and integrate concepts related to different crop production systems and crop rotations.	3, 10, 11
3	8. Explain the impact of pest and disease in crop production and develop methods for disease and pest control.	3, 10, 11
3	9. Construct a list of different government and non-government farm programs and explain the role government plays in crop production.	1, 2, 5, 8
4	10. Analyze global crop production and the role played by the US.	3, 5
5	11. Assess the environmental, social, and consumer issues affecting crop production.	2, 3, 5
3	12. Apply technological advances, communication, business, and management strategies appropriate for the agronomy industry.	4, 6, 7, 8, 11

CORE VALUES

The Core Values are a set of principles that guide in creating educational programs and environments at Edison. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

TOPIC OUTLINE

1. Introduction to Agronomy
2. Agronomic and Societal Development

3. Plant Anatomy
4. Plant Genetics
5. Plant Morphology
6. Soils
7. Fertility and Nutrient Management
8. Water Management, Drainage and Irrigation
9. Disease and Pest Control
10. Production Systems and Crop Rotations
11. Farm Programs
12. Global Crop Production
13. Issues in Agronomy