Northwest Arkansas Community College
(Science and Mathematics Division)

Discipline Code
AGRN

Course Number
2103

Course Title
Crop Science

Catalog Description
Principles of plant growth, development, and utilization and how these principles relate to crop production. Emphasis on major agronomic crop species including forage crops. Three hours lecture weekly.

Prerequisites/co-requisites
None. Strongly recommended: BIOL 1544 Principles of Biology I (or its equivalent) with a grade of C or better. Co-requisite AGRN 2101 Crop science lab.

Credit Hours
3 credit hours

Contact hours
45 lecture contact hours

Load hours
3 load hours

Semesters Offered
Fall

ACTS Equivalent
None

Grade Mode
A-F

Learning Outcomes
Students completing this course will be able to:
- Summarize the evolution of field crop production through history
- Identify nomenclature, growth stages, and anatomy of major agronomic crop species.
- Describe the role of crops in food and fiber for the world economy.
- Evaluate the theoretical and practical aspects of agronomic principles.

- Evaluate basic management systems to aid in good decision making for the environment and production.

General Education Outcomes Supported
Students develop higher-order thinking skills.
Students demonstrate information literacy.

Standard Practices

Topics list
- Importance of Crop Plants for food, Feed, Fiber, and Fuel
- Origin, Classification, and Importance of Major Field Crops
- Crop Growth and Development
- Crop Physiology
- Crop Environmental Factors
- Agronomic and Environmental Problems
- Integrated Pest Management
- Cropping Systems and Practices
- Crop Breeding and Improvement
- Sustainable production

Learning activities
- Courses must, at a minimum, cover the core learning outcomes for each topic.

Assessments
- All students will be given a pre-test with 25 general knowledge questions. At the end of the semester, students are given a post-test over the same material. Sharing this information with the student at the end of the semester helps to demonstrate competence.
- Evaluating general higher level thinking skills will be developed through activities such as: computer assignments and research papers include researching material using Internet sources and incorporating these ideas into a research assignment or paper.

Grading guidelines
- A minimum of 70% of the grade must be proctored, supervised, or otherwise verified.

Revision Date April 6, 2022