

## Course Number and Title: AGS 202 Agronomic Crops

**Campus Location:**

Georgetown

**Effective Date:**

2022-51

**Prerequisite:**

MAT 152 or higher, AGS 101

**Co-Requisites:**

none

**Course Credits and Hours:**

3.00 credits

3.00 lecture hours/week

0.00 lab hours/week

**Course Description:**

This course covers principles and production for major agronomic crops, including fertilization and tillage practices and economics of production.

**Required Text(s):**

Obtain current textbook information by viewing the [campus bookstore - https://www.dtcc.edu/bookstores](https://www.dtcc.edu/bookstores) online or visit a campus bookstore. Check your course schedule for the course number and section.

**Additional Materials:**

None

**Schedule Type:**

Classroom Course

**Disclaimer:**

None

**Core Course Performance Objectives (CCPOs):**

1. Interpret agronomic crop requirements and their relationship to the environment. (CCC 1, 5; PGC 3)
2. Assess methods of crop selection for a growing season. (CCC 1, 2, 5, 6; PGC 5, 4)
3. Integrate the broad sciences of botany, anatomy, taxonomy, physiology, soil, climatology, genetics, entomology, and pathology that are intrinsically involved in crop production. (CCC 1, 2, 5, 6; PGC 2, 3, 4)
4. Analyze principles that support adopting or rejecting new technologies and techniques in agronomic production. (CCC 1, 2, 5, 6; PGC 2, 3, 4)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

**Measurable Performance Objectives (MPOs):**

Upon completion of this course, the student will:

1. Interpret agronomic crop requirements and their relationship to the environment.
  1. Compare changes in climates as related to agronomic production.
  2. Differentiate soil structures and amendments necessary for plant production.
  3. Select tillage practices best used for specific crops.
  4. Apply integrated pest management (IPM) techniques as needed for weed and other pest problems associated with crop production.
2. Assess methods of crop selection for a growing season.
  1. Evaluate seed selection for quality and production needs.
  2. Compare methods of planting agronomic crops for production.
  3. Compare contract prices for agronomic crops when selecting seed.
3. Integrate the broad sciences of botany, anatomy, taxonomy, physiology, soil, climatology, genetics, entomology, and pathology that are intrinsically involved in crop production.
  1. Differentiate botanical structures of agronomic plants.
  2. Compare morphological, physiological, and genetic factors of crop development.
  3. Select methods to access information resources needed to solve specific field crop production problems.
  4. Compare energy, water, and nutrient flows that pertain to field crop production.
4. Analyze principles that support adopting or rejecting new technologies and techniques in agronomic production.
  1. Analyze the importance of quality factors in crops and relate to the factors that influence the production of quality in agronomic crops.
  2. Compare cultural practices for crop selection, production practices, and pest management in soybeans, corn, cereals, sorghum, grasses, and legume forages.
  3. Analyze the economics of production.

**Evaluation Criteria/Policies:**

The grade will be determined using the Delaware Tech grading system:

90	-	100	=	A
80	-	89	=	B
70	-	79	=	C
0	-	69	=	F

Students should refer to the [Student Handbook - https://www.dtcc.edu/handbook](https://www.dtcc.edu/handbook) for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

**Final Course Grade:**

Calculated using the following weighted average

Evaluation Measure	Percentage of final grade
Exams (4-6) (Summative) (equally weighted)	60%
Project/Serial Problems (Summative) (equally weighted)	10%
Assignments/Activities/Quizzes (Formative) (equally weighted)	30%
TOTAL	100%

**Core Curriculum Competencies (CCCs are the competencies every graduate will develop):**

1. Apply clear and effective communication skills.
2. Use critical thinking to solve problems.
3. Collaborate to achieve a common goal.
4. Demonstrate professional and ethical conduct.
5. Use information literacy for effective vocational and/or academic research.
6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

**Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):****AGSAASPAG**

1. Apply basic agribusiness management procedures to production and marketing of agriculture products.
2. Integrate pest management procedures into crop production techniques.
3. Demonstrate production techniques related to sustainable agriculture.
4. Demonstrate scheduling, production, marketing, harvesting, and safe handling of crops.
5. Describe the importance of poultry, livestock, and crop production to the agriculture industry.
6. Assess breeding, care, and nutrition of livestock animals.

**Disabilities Support Statement:**

The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the [disabilities services - https://www.dtcc.edu/disabilitysupport](https://www.dtcc.edu/disabilitysupport) web page or visit the campus Advising Center.