MURRAY STATE UNIVERSITY
COURSE SYLLABUS OUTLINE

SCHOOL OF AGRICULTURE

COURSE NUMBER: AGR 649                  CREDIT HOURS: 3

I.      TITLE:

Weeds and Their Control

II.     CATALOG DESCRIPTION:

A study of the introduction, methods of dissemination, reproduction, and control of weeds by the most reliable methods and techniques.

*To receive graduate credit for this course, a student must be admitted to graduate studies prior to registering for the course.*

III.    PURPOSE:

To become knowledgeable about the science of weed control.

IV.     COURSE OBJECTIVES:

To develop certain competencies in weed control. Upon completion of the course, the student should be able to meet the criteria listed below:

A. Identify the common harmful weeds of mid-America.
B. Compare chemical and non-chemical weed control options.
C. Explain the principles of perennial weed control.
D. Explain the principles of herbicide selectively.
E. Understand herbicide formulations.
F. Read and explain pesticide label instructions.
G. Choose a proper herbicide for a given situation.
H. Calculate the cost/acre for applying a pesticide.
I. Calibrate a sprayer for field application.
J. Analyze and explain instances of herbicide failure.
K. Explain personal safety procedures for pesticide use.
L. Pass the Kentucky Restricted Use Pesticide Test.

V.      CONTENT OUTLINE:

A. Methods of Weed I.D.
B. Weed Ecology
C. Weed Control Methods
D. How Herbicides Work – Selectivity
E. Herbicide Formulations
F. Herbicide Mode of Actions
G. Row Crop Weed Control
H. Forage Crop Weed Control
I. Lawn Weed Control
J. Herbicide Toxicology
K. Pesticide Safety
L. Preparation for Certification

VI. INSTRUCTIONAL ACTIVITIES:

A. Lecture
B. Assembling a resource notebook
C. Field experiences

VII. FIELD AND CLINICAL EXPERIENCES:

A. Collecting 60 weeds of mid-America
B. Field trips to University farm
C. Preparing job bids
D. Taking state pesticide exam

VIII. RESOURCES:

A. E-study center resources
B. Weeds of the United States – CD-ROM
C. Chemical product guides
D. Slides
E. Herbicide samples
F. Videotapes

IX. GRADING PROCEDURES:

An online gradebook will be maintained on the class e-study website.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three regular exams</td>
<td>300</td>
</tr>
<tr>
<td>Weed collection</td>
<td>150</td>
</tr>
<tr>
<td>Final exam</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>600</td>
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</table>
Students obtaining the following amounts of total points are guaranteed the following grades:

- $\geq 540$ A
- $\geq 480$ B
- $\geq 420$ C
- $\geq 360$ D
- $< 360$ E

The instructor reserves the right to lower this scale on a linear basis, as the need arises. Graduating seniors are expected to take the final along with other students during finals week.

Three mid-semester exams will be given with each being worth 100 points. Points given for graded homework assignments will be considered a portion of the points given for the subsequent class exam. The final exam will draw on all the knowledge gained during the semester and be worth 150 points.

Students should tell the instructor when they have to be away from class so that we can plan make-up work. I try to maintain a reasonable make-up policy for emergency situations by allowing the student to make-up the work.

No extra work may be done to raise an individual’s grade.

**X. ATTENDANCE POLICY:**

Please refer to the most current copy of the *Murray State University’s Undergraduate Bulletin and Graduate Bulletin*.

**XI. ACADEMIC HONESTY POLICY:**

(Adopted by the MSU Board of Regents)

Cheating, plagiarism (submitting another person’s material as one’s own), or doing work for another person which will receive academic credit are all impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an examination, the unauthorized copying of examinations, assignments, reports, term papers, or the presentation on unacknowledged material as if it were the student’s own work. Disciplinary action may be taken beyond the academic discipline administered by the faculty member who teaches the course in which the cheating took place.

NOTE: The School of Agriculture Faculty have adopted and implemented an Academic Honesty Policy in addition to the University Honesty Policy, which can be found in the current *Undergraduate Bulletin and Graduate Bulletin*. The policy sets guidelines regarding acts of dishonesty and the procedure to follow should an event occur. It is each Agriculture student’s responsibility to obtain and read a copy of this document. The School’s Academic Honesty Policy can be obtained by asking for a copy from any Agriculture Faculty
member or the Secretary.

XII. TEXT AND REFERENCES:


Field Crop Scouting Manual, (X880d edition), 2004, S.M. Bissonnette, Univ. of Illinois, Champaign, IL.

XIII. PREREQUISITES:

Prerequisites: AGR 140, or AGR 160, or AGR 240

XIV. EXPECTED STUDENT BEHAVIORS:

A. Exhibit a positive attitude toward the class.
B. Come to class prepared for discussion and interaction.
C. Be cooperative with peers and instructor.
D. Regular attendance.
E. Make-up work to be initiated by the student.
F. Another member of the class picks up handouts and provides notes if class is missed.

XV. EXPECTED INSTRUCTOR BEHAVIORS:

A. Be fair in all class related activities.
B. Test questions should reflect material covered in class and assigned reading.
C. Be patient, keep office hours, be available after class.
D. Understand this class is not the only thing the students are taking.
E. Be sincere – treat students as people – follow the Golden Rule.
F. Keep the class on task – keep it focused on expected competencies.

XVI. OTHER INFORMATION:

Any change in the syllabus or in the schedule of class activities or meetings will be clearly announced during regular class time. The instructor reserves the right to make any changes in the course, which, in his judgment, are necessary.

XVII. STATEMENT OF AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY:

Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or
disability in employment, admissions, or the provision of services and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities. For more information, contact Sabrina Y. Dial, Director of Equal Opportunity, Murray State University, 103 Wells Hall, Murray, KY 42071-3318. Telephone: 270-809-3155 (voice), 270-809-3361 (TDD).

XVIII. CELL PHONE POLICY: Cell phones must be kept on vibrate and out of sight and use (i.e. secured to a person’s belt or kept in a bag or purse away from desks and lab counters). Please refer to the full policy provided on the class e-study site or the MSU agriculture page (www.murraystate.edu/ag).