SEWARD COUNTY COMMUNITY COLLEGE **COURSE SYLLABUS**

I. TITLE OF COURSE: AG1814- Integrated Pest Management with Lab

II. COURSE DESCRIPTION: 4 credit hours

3 credit hours of lecture and 1 credit hours of lab per week.

A study of an ecological approach to agricultural pest control that integrates pesticides/herbicides into a management system. Students will learn to identify pest and plant diseases, and control the pest using pesticides and IPM technology including organic techniques. A laboratory period is an integral part of the course designed to give the student an opportunity to gain hands-on experience using the Sustainable and conventional practices of the lab and field settings.

For each unit of credit, a minimum of three hours per week with one of the hours for class and two hours for studying/preparation outside of class is expected.

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III. PROGRAM AND/OR DEPARTMENT MISSION STATEMENT:

The agricultural program at Seward County Community College/Area Technical School provides opportunities to further each student's knowledge and apply specific methods and techniques to the management and performance of agricultural operations.

IV. TEXTBOOK AND MATERIALS:

Sustainable Horticulture, Today and Tomorrow, Raymond P. Poincelot, Pearson Education 2004, 1ST Edition

V. SCCC OUTCOMES

Students who successfully complete this course will demonstrate the ability to do the following SCCC Outcomes.

I: Read with comprehension, be critical of what they read, and apply knowledge gained to real life

II: Communicate ideas clearly and proficiently in writing, appropriately adjusting content

and arrangement for varying audiences, purposes, and situations.
III: Communicate their ideas clearly and proficiently in speaking, appropriately adjusting content fand arrangement for varying audiences, purposes, and situations.
IV: Demonstrate mathematical skills using a variety of techniques and technologies.
V: Demonstrate the ability to think critically by gathering facts, generating insights,

analyzing data, and evaluating information

VI: Exhibit skills in information and technological literacy

VI. COURSE OUTCOMES:

The student will learn to identify and understand the various insects and other pests of animal origin.

The student will learn to identify and understand the various pathogens that attack plants. The student will understand the competitive role of weeds in crop production. The student will learn about the usage of proactive controls (barriers, deterrents, cultural practices) to prevent or restrict pests and diseases.

The student will understand how IPM works

The student will understand reactive controls (traps, biological controls, cultural controls, and pesticides) and their usage to control pests and diseases. The student will understand how to use proactive and reactive controls with IPM approaches to

achieve sustainable plant protection

VII. COURSE OUTLINE:

- 1. Pest of Animal Origin
- 2. Non Animal Pest
- 3. IPM Basics
- 4. Preventing Pest and Diseases: Passive Practices
- 5. Reactive Practices to Pest Control

VIII. INSTRUCTIONAL METHODS:

Lecture Discussion Group Activities Class Handouts Video presentation Hands-on experience

IX. INSTRUCTIONAL AND RESOURCE MATERIALS:

Ball Handbook NC Pesticide Manual **Class Handouts**

X. METHODS OF ASSESSMENT:

Methods of assessing the general course outcomes and the specific course competencies include class participation, attendance, exam scores, homework assignments, and presentation assignments.

SCČC Outcome #1 will be assessed and measured by class participation and comprehension of material read.

SCCC Outcome #2 will be assessed and measured by written explanations for thoughts and ideas related to soil science through exams and written work.

SCCC Outcome #3 will be assessed and measured by classroom discussions, and oral presentations.

SCCC Outcome #5 will be assessed and measured by students decisions regarding interpretations from soil surveys.

SCCC Outcome #6 will be assessed and measured by students use of current soil analysis programs and technologies

XI. ADA STATEMENT:

Under the Americans with Disabilities Act, Seward County Community College will make reasonable accommodations for students with documented disabilities. If you need support or assistance because of a disability, you may be eligible for academic accommodations. Students should identify themselves to the Dean of Students at 620-417-1106 or going to the Student Success Center in the Hobble Academic building, room 149 A.