

Agriscience Research

Holton Agriculture Education Department

Name: _____ SSN: _____ / _____ / _____

Instructor: Jason M. Larison School Year: _____

Verification Signatures _____

Hours Completed _____

Student: _____ Date: _____

Instructor: _____ Date: _____

Key to Integrated Competencies

(B) - Academic {AC - Communications/English, AM-Math, AS-Science}
(CD) - Career Development (E) - Experience-Based (L) - Leadership

Circle to indicate level of competency achieved:

3 Skilled-Works Independently 2 Limited skill-Needs assistance 1 Skill undeveloped-but received instruction 0 No exposure

SENIORS ONLY

(Students must be enrolled in another agriculture course at the same time as well as have taken 3 years of ag ed)

Agriculture Research Project – (E)

- Research Methodology**
- 3 2 1 0 1. Identify science terms related to research
 - 3 2 1 0 2. Demonstrate research skills in collecting information
 - 3 2 1 0 3. Complete the six steps of experimental research
 - a. State the problem or ask the question
 - b. Review literature or ask the experts
 - c. Develop a hypothesis
 - d. Design experiment
 - e. Collection of data
 - f. Drawing of conclusions
 - 3 2 1 0 4. Critiqued past research projects
 - 3 2 1 0 5. Follow safety procedures

- 3 2 1 0 1. Develop an oral report outline
- 3 2 1 0 2. Used diagrams, handouts, or other visual items
- 3 2 1 0 3. Comprehensible to the audience
- 3 2 1 0 4. Stated the problem or question clearly
- 3 2 1 0 5. Cited literature and experts
- 3 2 1 0 6. Defended their research hypothesis
- 3 2 1 0 7. Explained and justified an appropriate experimental design
- 3 2 1 0 8. Detailed the collection of data
- 3 2 1 0 9. Gave conclusions based on analysis of data collected

- 3 2 1 0 3. Develop a research paper
 - a. Develop a cover page
 - b. Write an introduction
 - c. Summarize elementary/middle school project
 - d. Develop a work cited component
 - e. Provide a budget entry
 - f. Explained experimental design
 - g. Explained collection methods
 - h. Compile results and conclusions
 - i. Develop table of contents

Elementary/Middle School Research Demonstration

- 3 2 1 0 1. Make contact and schedule event demonstration class
- 3 2 1 0 2. Developed grade level appropriate agriculture demonstration
- 3 2 1 0 3. Demonstrated appropriate dress & conduct with demonstration
- 3 2 1 0 4. Meet timeliness as scheduled with cooperating class

- 3 2 1 0 1. Develop a graphic organizer over research project
 - a. Used photos or pictures
 - b. Used color and shading
 - c. Developed logical progression of information
- 3 2 1 0 2. Develop a display board
 - a. Used visual diagrams/photos
 - b. Used charts/graphs
 - c. Used captions/summaries
 - d. Used appropriate headings & titles

- 3 2 1 0 1. Complete FFA Agriscience Application
- 3 2 1 0 2. Develop a resume of job skills
- 3 2 1 0 1. Consult regularly with instructor (FFA advisor) about the experience. (AC)
- 3 2 1 0 2. Consult with community and university professionals for ideas for SAE. (AC)
- 3 2 1 0 3. Photograph or video the experiment, skills, progress, and results. (AC)
- 3 2 1 0 4. Prepare a written presentation of project and results. (AC)
- 3 2 1 0 5. Prepare a verbal presentation of project and results. (AC)
- 3 2 1 0 6. Conduct an interview over the project. (AC)
- 3 2 1 0 7. Write and submit a news release over the research project (AC)
- 3 2 1 0 8. Complete and submit a FFA Proficiency Award Application. (E)
- 3 2 1 0 9. Participate as an active member on a POA committee. (L)

Research Proposals

- 3 2 1 0 1. Give justification of doing a project
- 3 2 1 0 2. Develop a project cost analysis
- 3 2 1 0 3. Develop a project timeline

- 3 2 1 0 1. Develop a graphic organizer over research project

- 3 2 1 0 5. Prepare a verbal presentation of project and results. (AC)

Research Justification

- 3 2 1 0 1. Complete journal critiques/reviews
- 3 2 1 0 2. Write a business letter asking for research information
- 3 2 1 0 3. Do an interview with an expert in the research field
- 3 2 1 0 4. Complete daily journal entries

- 3 2 1 0 2. Develop a display board

- 3 2 1 0 8. Complete and submit a FFA Proficiency Award Application. (E)

Research Oral Presentations

Computer Literacy (CD)

- 3 2 1 0 1. Define, understand, and use common computer technology terms (CD)
- 3 2 1 0 2. Compose, organize, and edit information using a computer (CD)
- 3 2 1 0 3. Use presentation software to design and create a presentation (CD)
- 3 2 1 0 4. Use ag related software/websites (CD)
- 3 2 1 0 5. Access, navigate, & use on-line services (CD))
- 3 2 1 0 6. Send and receive email messages with enclosures (CD)
- 3 2 1 0 7. Use Quicken to manage personal finances (CD)
- 3 2 1 0 8. Use Microsoft Office (Word, Excel, Powerpoint, and Internet Explorer) to complete projects (CD)

Work Ethics (CD)

- 3 2 1 0 1. Apply employee rules, regulations, and policies including: (CD)
 - a. Punctuality and dependability
 - b. Responsibility for the position
 - c. Accuracy
 - d. Efficiency
- 3 2 1 0 2. Understand and value effective work ethic attitudes and behaviors such as: (CD)
 - a. Acceptance of the job requirements
 - b. Willingness to take initiative with new challenges
 - c. Take responsibilities for decisions and actions

Supervised Agriculture Experience & Record Keeping

- 3 2 1 0 1. Identify and maintain the SAE (CD)
- 3 2 1 0 2. Construct a personal budget (AM)
- 3 2 1 0 3. Utilize the Kansas FFA SAE Record book to monitor the SAE (CD)
- 3 2 1 0 4. Complete a local and district proficiency award application (L)
- 3 2 1 0 5. Complete chapter and/or State FFA Degree Applications (L)
- 3 2 1 0 6. Use Quicken to track income and expense in cash, checking, and savings (CD)
- 3 2 1 0 7. Track SAE skills developed, hours worked as well as FFA, School, and community activities using the Ag Ed record book: (CD)
- 3 2 1 0 8. Set appropriate long and short term goals for the SAE program.