

Agricultural Experiment Station (AES) Essentials of a Project Outline

Title:

Should be brief, clear, and specific. The title is limited to 140 characters including spaces. Avoid using obvious phrases as “a study of,” “research on,” or “the investigation of.” The title, by itself, should give a good indication the project topic.

Probable Duration:

An estimate, in months, of the time that will be required to complete the objectives. Most projects are limited to 60 months. Projects can start the first of any month, but they *must* end on one of the following dates: March 31, June 30, September 30, or December 31.

Personnel:

Project Investigator(s):

Multi-investigator, multi-disciplinary, and/or multi-departmental projects are highly encouraged. List the project investigator(s) (academic staff only; do not list graduate students or technical service personnel) and their respective academic unit. ***This section should include only faculty that will be participating for the full duration of the project.*** These individuals should be included on the CRIS AD416 forms.

Indicate for each individual the appropriate percentage of their annual time to be committed for the duration of the project. (*If individuals are going to participate for less than the duration, they should be listed in the PSU Collaborators section below.*)

The first-named investigator should be at least an assistant professor or equivalent. This person will be considered the leader and will be responsible for subsequent reporting requirements.

PSU Collaborators:

Cooperation with other departments and colleges is encouraged. List only those individuals (and their respective academic unit) that will make a significant contribution to a portion of the project (not for the full duration). These individuals should *not* be included on the USDA/CRIS AD416 form. If cooperators are College of Agricultural Sciences employees, it will be the unit’s responsibility to provide the appropriate documentation to assure that the individual has time assigned to the project when needed (see policy at <http://research.cas.psu.edu/PDFs/PersonnelAssignmentPolicy.pdf>). Where a project is cooperative between two or more departments/colleges, care should be exercised to assure that the other units are advised of any changes in the project plans. *The division of effort, coordination, and responsibilities of each department/college should be clearly understood and indicated.* If there are no PSU collaborators, omit this section from your outline.

External Collaborators:

List external faculty, staff, or extension educators; growers; private, state, or federal agencies; and others who are collaborating formally or informally on this project. Please indicate (briefly) the nature of that collaboration (e.g., advisor, in-kind service, etc.). If there are no external collaborators, omit this section from your outline.

Advisory Committee:

An advisory committee is optional. It may be used if desired by the department or project leaders. Advisory Committee members *cannot* be peer reviewers of the project. If no advisory committee is used, omit this section from your outline.

Justification, Relevance, and Expected Outcomes or Impacts:

- Describe the importance of the problems to agriculture (including forestry), natural resources, environment, food safety, human nutrition, rural and community development, and general public at the state, regional, and/or national scale.
- Describe the project in the context of societal needs and/or issues that will be addressed.

- Describe ways in which public welfare or scientific knowledge will be advanced.
- Describe expected outcomes and ways in which individuals, families, businesses, and/or communities are expected to improve or change as a result of this project.
- Describe under-represented populations involved in this project.

Previous Work (Background) and Present Outlook:

A brief summary covering pertinent research on the problem, the status of current research and the additional information needed, and how this project is expected to contribute to this need. Cite only the more important of the recent publications.

The nature of the project and its objectives will obviously determine the ease of predicting success, but where feasible it will be appropriate to indicate the likelihood of achieving the objectives in a specific length of time. This section should indicate 1) questions that have not been answered by research and 2) how the proposed research will fill the gaps.

Objectives:

A concise, complete, clear, logically arranged, and numbered series of statements defining the specific objectives of the project. This section is also part of the USDA/CRIS AD416 form that must be completed on the web. Develop your objectives in such a way that measurable results and impact can be reported in future years of the project.

Procedures:

There should be a numbered procedure statement to correspond with each numbered objective. These statements should outline the essential working plans and methods that will be employed in attaining each of the stated objectives. The location of the work, equipment available, and additional equipment needs should be indicated. The procedure statement should indicate that the research needs and plans have been carefully considered and the proposed work has the potential of providing data and information that will permit the objectives to be accomplished.

Experimental designs should maximize efficiency of the research effort and provide data suitable for statistical analysis. While the details of experimental design and the number of replications will generally not be specific, it should be understood that due consideration has been given to the level of experimental error anticipated and the levels of precision required for the results to be useful.

Consideration should be given to the eventual method of ‘publication.’ Plans should be made for proper collection and recording of data, including photographs or video pictures, if appropriate.

Stakeholder Engagement:

Describe how stakeholders will be involved in the design, implementation, and/or evaluation of the project.

By stakeholders, we are identifying people or organizations who have a direct interest in the application of the research to be conducted under this AES project. If an output of the research is extension programming, then county staff and their clientele may be appropriate stakeholders to identify. Likewise, if there are likely to be industrial or agency users of the research outputs, these would be considered stakeholders.

The goal is to ask researchers to consider the impact of their research in application. This section might be brief, but should identify the key clientele of the applied research, discuss how the research results might be disseminated in a way that is useful to them, and indicate any mechanisms for obtaining feedback from them as to the utility of the results or further needs.

Scope of Impact:

Identify which of the following apply to the activities conducted under this project: 1) State Specific; 2) Multistate Extension; 3) Multistate Research; 4) Integrated Research and Extension; 5) Multistate Integrated Research and Extension; 6) International Research; or 7) International Research and Extension.

When indicating that this project has multistate or international impact, please list the names of the states and/or countries.

Integrated Activities:

Describe any specific ways the project links research and extension/outreach.

Milestones:

Describe significant anticipated accomplishments in the life of the research project that will demonstrate reportable progress.

Timeline: *(for McIntire-Stennis projects only)*

New McIntire-Stennis projects will need a timeline/timetable. It can be in a chart or graph form and should account for each objective/procedure and the expected date that it will be finished. Each year during the duration of the project should be accounted for.

Literature Cited:

Include only those references cited in the text. Use the formatting style of your choice, but be consistent.