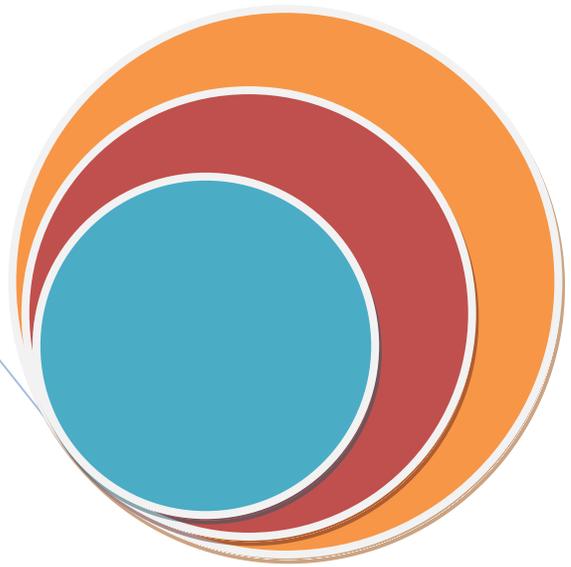


“Every day, every where is USDA!”



# USDA Student Employment Program

## Capstone Project Guidelines

OHRM



Last revised 1/25/2011

## **Mission**

*We provide leadership on food, agriculture, natural resources, and related issues,  
based on sound public policy,  
the best available science,  
and efficient management.*

## **Vision**

*We want to be recognized as  
a dynamic organization  
that is able to efficiently provide  
the integrated program delivery needed  
to lead a rapidly evolving  
food and agriculture system.*

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# Capstone Project

*Capstone (n): finishing touch: a crowning achievement; a culmination*

## Introduction

A capstone experience is an intensive, active learning project that requires planning and implementation as well as preparation of a final work product. This type of project will allow a student intern to research a particular area of interest within USDA and will help the student to gain an understanding and potentially foster an interest in agricultural or rural issues and offer suggestions or solutions to challenges USDA currently faces. The experience will provide a culminating educational experience for the student and a rewarding opportunity for the Agency to gain insight and knowledge.

## Definition of a Capstone Project

While a capstone project is very similar to an undergraduate or master's thesis, there is often a difference. In many cases, a capstone project is not just a paper; it is also an actual project that requires “hands-on” experience by the student. An undergraduate or master’s thesis do not always require “hands-on” experience and often rely solely on research.

## Intern Appointment

Student appointments lasting longer than 10 weeks in length will be required to complete a capstone experience project.

## Project Themes/Data Examples

Different types of data are involved in a capstone project. Data may take on a variety of forms such as interpretive, empirical and evaluative. The range of data is variable and needs to match your question or topic for the capstone project. Examples of data sources or projects themes could include:

- Marketing –
  - Consumer focus groups within the Agriculture arena, foreign or national
  - Agriculture marketing products comparison or cost benefit analysis
- Economics –
  - Reviewing and commenting on a cost-benefit analysis for a new USDA initiative

- Bio-fuel initiatives
- Benchmark indices and biological samples data sets
- Staffing -
  - Innovative approaches to recruitment, recognition & retention of high-performing, staff
  - Student programs initiatives
  - Updated work plan for three year strategic plan
  - Volunteer assistance plan to improve efficacy
- Sustainable Agriculture –
  - Investigate the significance of sustainable agriculture and its role in helping societies produce enough food for people
  - Technology information systems utilized across agricultural location areas
- Development –
  - Investigate economic effects on development in a region and its ecosystems and societies
- Population Growth and Resources –
  - Investigate how population growth affects resource availability
- Migration –
  - Investigate the significance of migrations of peoples and the resulting benefits and challenges
- Diversity and Nationalism –
  - Investigate the tensions that may develop between cultural diversity and nationalism within a country and their consequences
- Conflict, Stability, and Change –
  - Investigate the significance of conflict, stability, and change in governmental systems within the region
- Global Climate Change –
  - Investigate the impact of global climate change and describe the significance for human/environment relationships
- Natural Disasters –
  - Investigate the significance of natural disasters by describing the effects on human and physical systems including the economy, and the responsibilities of government.

## **Requirements**

There are no length or format requirements for this project, except that a paper and presentation are required. The suggested length of the capstone experience paper is 10 pages. Students may work with their schools to request credit for the capstone project. Please check with your academic advisor or course instructor if there are additional requirements for course credit.

Students will be encouraged to explore opportunities to collaborate and reach an explicit agreement with colleagues, consumers and/or stakeholders in USDA to investigate or evaluate a mutually agreed upon project. Given the complexity and time commitment involved in the capstone project, students may work alone or perhaps another alternative may entail groups of students simultaneously contributing toward a single mutual project effort that brings into play several key players.

The final draft of the written product should be submitted to the supervisor at least one to two weeks prior to the end of the student internship. The paper should include the outcomes of the student's experience in addressing the challenge identified in the project.

## **Roles and Responsibilities**

The capstone experience is a collaborative effort among the student and their supervisor. The student and the supervisor will communicate and finalize the project proposal and overall plan.

- **Students:**
  - It is the student's responsibility to develop and propose a capstone experience. Students must submit a brief description and receive approval of their proposed capstone experience project from their current supervisor. Some additional questions to be answered within the proposal: What do you hope to gain from your capstone experience? What outcome do you hope the capstone may produce?
  - Once a student understands the requirements of the capstone project, the student must be sure that he or she understands the topic that he or she will

focus on throughout the capstone project. This is the topic that the student will spend a great deal of time on over the course of his or her internship.

- During the research for the capstone projects, it's suggested that students keep detailed journals of their discoveries. These journals will help students to stay organized and remember what they have learned throughout the internship. These journals will also make the writing process easier and faster.
- Once the student has completed his or her research, the student should write an outline for the capstone projects paper. The outline will provide a guideline that students need to follow as they complete their papers. The outline will also serve as the starting point to writing the actual paper.
- Only after a student has completed an outline for the capstone project, the student should begin writing the paper. If the student is receiving credit from his or her school, the student should have many drafts completed before the student turns it in for a grade. Therefore, students need to make sure that they allow plenty of time for edits.
- Students who carry out capstone experience projects will be required to defend the final work product orally, by presenting the project to the supervisor or a desired committee.
- **Supervisor:**
  - Please make editorial suggestions to keep the project at an appropriate length and provide regular feedback on all aspects of the project.
  - The supervisor manages the student's work from start to finish, helping the student to refine a topic, develop an approach, and produce a polished creative work, which both the supervisor and the student will be proud.

## **Project Evaluation**

The project evaluation is based on the submission of a final paper to the supervisor describing the capstone experience; the activities undertaken, results, findings and recommendations and a presentation. After turning in the completed paper, the student gives a 10-15 minute

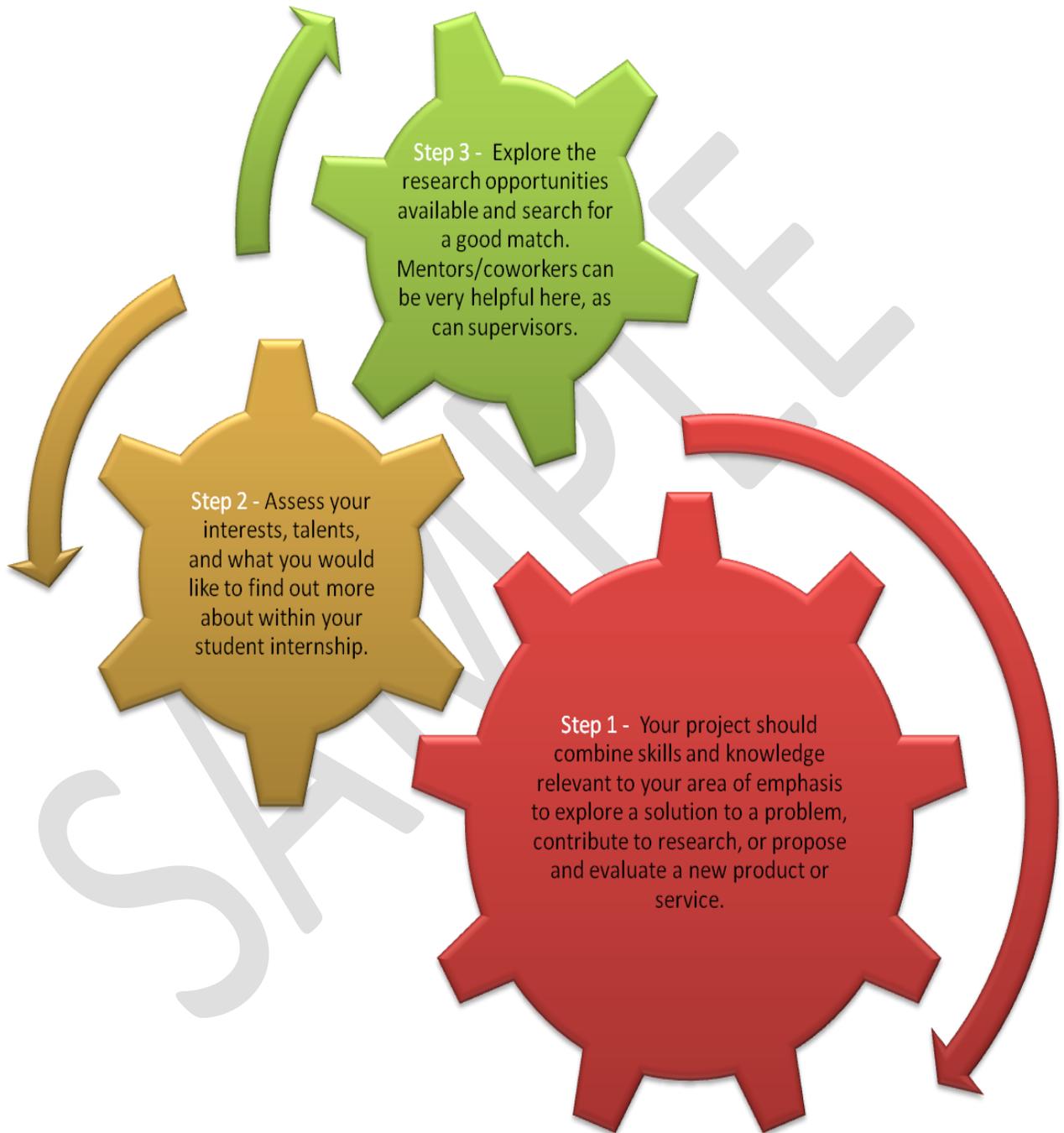
presentation of his or her work to the supervisor or any other colleagues. Supervisor will review the final written product and give suggestions or ask further questions following the presentation. The expectation is that the results of the capstone investigation would be disseminated within the collaborating agency and to other relevant stakeholders.

## **Timeline**

A realistic time frame is needed for students to complete the project in a timely manner. For example, an agency may have an ongoing project that the student could assume leadership for a particular component. The Office of Human Resources Management (OHRM) suggests interns to create a timeline with specific dates for their activities or work on their project. The following is a suggested timeline:

<b>Date</b>	<b>Goal</b>	<b>Status (%)</b>	<b>Completion Date</b>
<b>May 15<sup>th</sup></b>	<ul style="list-style-type: none"> <li>• Submit a brief description and receive approval for the capstone experience</li> </ul>		
<b>June 5<sup>th</sup></b>	<ul style="list-style-type: none"> <li>• Complete first draft and submit to supervisor</li> </ul>		
<b>June 6-12<sup>th</sup></b>	<ul style="list-style-type: none"> <li>• Confer with supervisor and make necessary revisions</li> <li>• Conduct additional research if necessary</li> </ul>		
<b>June 13-July 1<sup>st</sup></b>	<ul style="list-style-type: none"> <li>• Prepare the final capstone experience paper for submission to Supervisor</li> </ul>		
<b>July 15<sup>th</sup></b>	<ul style="list-style-type: none"> <li>• Capstone Project submitted and presentation completed</li> </ul>		

## Steps for Students to Begin Capstone Project



Students must consult with their supervisors and schools to determine the resources they need to acquire to complete their projects.

The USDA Internship Program has put together the following list of resources that interns can utilize to complete their projects:

- **USDA Resources:**
  - Database on specific topics at the National Agricultural Library part of the Agricultural Research Service.
  - Colleges and Universities staff, faculty, and current and alumni USDA interns
  - Examples of projects undertaken by previous USDA interns.
  
- **Examples of projects on environment and resources:**
  - Columbia University, School of International and Public Affairs, <http://www.sipa.columbia.edu/academics/workshops/projects.html>.
  - Columbia University, The Department of Electrical Engineering, <http://www.ee.columbia.edu/spl/>
  - Columbia University, Medical School, [http://cumc.columbia.edu/dept/pt/prospective/elp/capstone\\_projects.html](http://cumc.columbia.edu/dept/pt/prospective/elp/capstone_projects.html)
  - University of California, Santa Barbara, Bren School: <http://www.bren.ucsb.edu/research/gp2009.htm>
  - University of Michigan, School of Natural Resources and Environment: [http://www.snre.umich.edu/current\\_students/masters\\_projects/masters\\_archives](http://www.snre.umich.edu/current_students/masters_projects/masters_archives)
  - Duke University's Nicholas School: <http://www.nicholas.duke.edu/people/students/advising/mpsubjects.html>
  
- **Example of projects on agriculture:**
  - <http://www.googleusercontent.com/u/universityofgeorgia?q=capstone+projects+in+agriculture&domains=uga.edu&site=search=uga.edu>.
  - <http://www.sterlingcollege.edu/sustainable-agriculture.html>.
  - <http://www.montana.edu/provost/assessment/CapstoneCourses.html>.
  
- **Other theme projects:**
  - Georgetown University, Center for Nonprofit Leadership: [http://cpnl.georgetown.edu/pages/capstone\\_project\\_example.cfm](http://cpnl.georgetown.edu/pages/capstone_project_example.cfm)
  - Aspen University, <http://www.aspen.edu/cybrary/capstone.htm>

- Harvard University, various schools projects,  
<http://search.harvard.edu:8765/query.html?col=cait&col=dce&col=fas&col=gsd&col=gse&col=hbs&col=hds&col=hms&col=hsdm&col=hsph&col=ksg&col=law&col=lib&col=rad&qt=+capstone+projects&charset=iso-8859-1>.

SAMPLE

