Semester Proposal Template Instructions

The semester proposal is due at the beginning of the team meeting on the fourth week of the semester. The use of a template will allow Engineering Service Learning teams to complete the semester proposal in a timely manner. Users should insert text into the document preserving the styles that has been preset. Prompt questions have been provided to help with the development of the text and are in blue font. Remove all blue text prior to submission.

**REMOVE ALL BLUE TEXT PRIOR TO SUBMISSION.**

Direct any questions regarding the project charter to your Teaching Assistant or Engineering Service Learning staff.

**DELETE THIS PAGE SHOULD PRIOR TO COMPLETION AND SUBMISSION OF THIS DOCUMENT.**

**Engineering Service Learning**

**at UC Merced**

**Semester Proposal**

Team: [Team Name]

Project: [Project Title]

Date: [Due Date]

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# Introduction (from project charter, if completed)

**\*\*\*\*\*\*COPY/PASTE FROM PROJECT CHARTER, IF COMPLETED\*\*\*\*\***

**USE THE BULLETED QUESTIONS TO HELP YOU ADDRESS THESE THREE GENERAL TOPICS. NOTE THAT ALL QUESTIONS DO NOT NEED TO BE ANSWERED.**

**Problem statement:** concise statement of your client (community partner organization), your client's specific problem that you will be addressing, who will benefit, and how. Provide information on the constraints, and resources.

* Who is the client (community partner organization) for this project?
* What is the overall mission of your community partner?
* Who does your community partner server? Who are their clients?
* What services does the client (community partner organization) provide to their clients?

**Solution statement:** concise statement of the solution that you will provide to meet the needs of the client (community partner organization). Describe the solution, including who will be affected (stakeholder groups), economic impact, adding capacity to the organization, and addressing the pressing need.

* Why are you doing the project (i.e. what is the motivation or need for the project?
* What specific problem/need are you addressing?
* How does your project fit within the mission of your client (community partner organization) and your team?
  + How does this project help the mission of the community partner?
* What are going to be the project deliverables, and effects on the client (community partner organization)?
* Will someone else be affected by the project after completion? If so, who?
  + Who has vital interest in the project’s success?
* What will be the economic impact of the project?
  + Will it save time for the community partner? Quantify how much $ in time savings.
  + Will this project result in an added capacity? What are the economic benefits to providing more services?
  + Will this project result in a new or improved way to bring in funding?

**Project timeline:** include a graphical timeline for the project and a description of the major milestones with projected deadlines.

**PROVIDE A GRAPHICAL TIMELINE AND A PARAGRAPH OUTLINING THE TIMELINE**

* What is the start date of the project?
* What is the expected date for completion of the project?
  + Include assessment of the fielded project into this date.
* What are the milestones and deadlines for the project? (these are not design phases, but could be related)
* Are there any factors that could negatively influence your timeline?
  + What are these factors?
  + How will you mitigate for them?

**Budget**

* What is the projected budget for the project?
* What categories make up the budget for the project?
* What factors might cause cost overruns?

**INCLUDE A PROJECTED BUDGET FOR THE PROJECT (TABLE)**

* Include a summary of the budget and how the categories will be used in the project. Budget categories may include costs associated with materials, travel, and other expenses associated with the project.

**DO NOT INCLUDE SPECIFIC DETAILS OF ITEMS YOU PROJECT TO PURCHASE IN THE TABLE.**

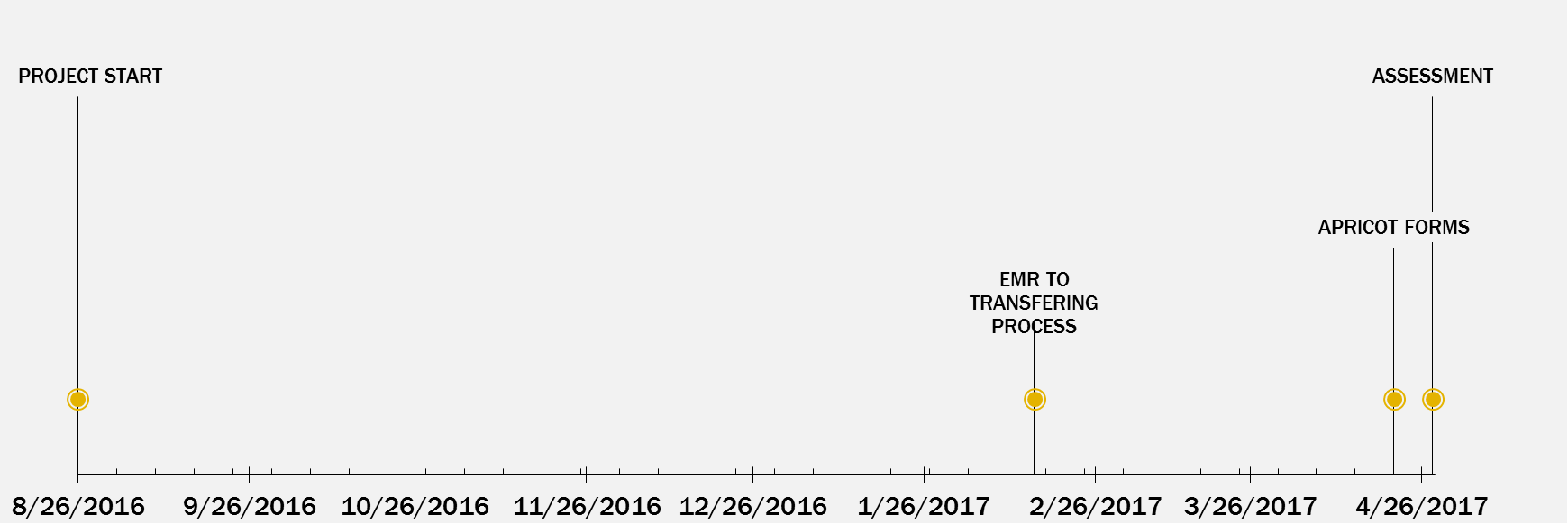
**EXAMPLE:**

The Merced County Rescue Mission (MCRM) works to serve the homeless community within Merced County and help them move towards a better life. The rescue mission provides both physical and spiritual needs, such as in the form of beds, food, clothing, personal care, and spiritual counseling. One such program within the MCRM, is the Hope Respite Care program which provides acute and post-acute medical care for homeless persons who are too ill or frail to recover from a physical illness or injury on the streets, but are not ill enough to be in a hospital and allows for a safe place to rehabilitate. Hope Respite Care offers patients a supportive environment with meals, oversight of medical treatment, follow-up care, and long-term housing options through case management. Through this program, the savings to Merced County was approximately $1.3 million last year alone in reoccurring emergency room costs.

The Hope Respite Currently program in its current state is able to provide support approximately twenty patients with nine rehabilitation beds. To manage the caseload of these patients, Hope Respite uses a paper-based filing system to hold medical records and patient profiles. This current system lacks easy way for the MCRM to track and report on the services provided through the Hope Respite project. As a result, many hours are spent compiling information to provide funding agencies regarding the services provided annually.

To address this challenge the MCRM has recently acquired a license to Apricot, an electronic file system that will be used to input and track client information for better case management and reporting. However, the transfer of the case management information to this new digital environment is costly in terms of time and money. The MCRM Engineering Service Learning team will be creating a system that will transfer all relevant case management information from its current paper form to the Apricot system. One hundred percent accuracy of the data transferred from the paper to the digital format is required. The result of this project will be to provide Hope Respite patient profiles within Apricot, and allow for more accurate reporting.

This reduction of administrative duties will allow for greater support for the homeless community in Merced County and the expansion of services to this community. It is estimated that Hope Respite will be able to increase their case load by at least 50%. The increased ability to track the serviced provided will also allow for improved reporting for grant applications, and other funding sources.



The anticipated duration of the Hope Respite Project is approximately 8 months, or 2 semesters, concluding in late April of 2017. The project start date is August 26, 2016. In the first part of January of 2017, the transfer process will be identified including the scanning of paper documents into a digital format. By mid-April of 2017, the transfer of digital forms to the Apricot management system will begin, followed by an assessment of the transfer process.

Insert the expected budget for the current semester through a table or a figure listing the major categories of the budget (i.e. travel, project supplies, training, etc.). DO NOT INCLUDE SPECIFIC DETAILS OF ITEMS YOU PROJECT TO PURCHASE IN THE TABLE.

**EXAMPLE:**

|  |  |
| --- | --- |
| **Item** | **Cost** |
| FAA License | $150 |
| Travel | $300 |
| Project Materials | $200 |
| TOTAL | $650 |

The total budget for this semester is $650. The new pilot will need an FAA pilot license, which will cost $150. Travel will cost around $300, for going to any off campus events or to meet clients, and to visit the farm. Project materials are anticipated to cost $200 for things such as batteries, rotors and the camera mount.

**Location of signed Project Charter [hyperlink location on box of signed Project Charter]**

# Semester [i.e. Spring 2015] Semester Plan

## Semester [i.e. Spring 2015] Current Phase of Project

What phase of the design process is your project in? Give examples of the tasks that you are performing to give evidence that you are in this phase of the design process. How does this relate to the overall timeline developed in the project charter and project report if available? Note any changes that will need to be made to the overall project timeline.

Example:

Currently the XXX team is in the middle Phase 2, the specification development phase.  In the specification development phase, our goal is to get a complete understanding of “what” is needed by more information on the context, stakeholders, requirements of the project, and why current solutions don’t meet need, and to develop measurable criteria in which design concepts can be evaluated. Once we complete this phase, we will be able to ensure that we have the correct specifications for our final project.

## Semester [i.e. Spring 2015] Proposed Semester Goal

Identify the specific goal for the project for the current semester, as agreed upon by the team, advisor and project partner. Review the Project Report from the previous semester if available.

**Example:**

By [date ~week 13, if not delivering this semester] the XXXX team will have completed [insert goal]. To meet this goal, the XXX team will be positioned to deliver in the XXXX semester. This will benefit the project by…

By April 21, 2017, the Merced County Rescue Mission Engineering Service Learning team will have completed a proof of concept prototype for the Hope Respite program at the Merced County Rescue Mission. This will include a proof of concept prototype with the appropriate HIPAA compliance and storage for patient data. This prototype will allow the team to lock down the sub-systems of the project and begin designing each one in parallel.

By April 21, 2017, the team will deliver the completed product. This means the team will have completed field-testing of the NDVI code, constructing the user interface, achieving autonomous flight and camera performance, and writing the user manual. After completion of prototyping and field-testing, the project will continue to the delivery and service/maintenance phases.

## Semester [i.e. Spring 2015] Proposed Semester Timeline

Insert a graphical timeline for the current semester, making sure to identify important milestones. Only include 1-3 milestones and the goal for the semester on the timeline. Use the Excel timeline file found on Catcourses.

Write a short paragraph describing the figure (timeline). Include a sentence of the goal (from previous paragraph) and the specifics listed as milestones. Include a sentence indicating how this relates to overall timeline in introduction section.

**Example:**

By April 21, 2017, the Merced County Rescue Mission Engineering Service Learning team will have completed a proof of concept prototype for the Hope Respite program at the Merced County Rescue Mission. By March 31, 2017, all the HIPAA features will have been accounted for in potential electronic medical record services in order to avoid unnecessary audits or violations of the law that is in place to protect patients. By April 15, 2017, the method of patient data storage will be in the proof of concept phase meaning that the appropriate database with double encryption that meets the users’ needs will be completed. By the end of the semester, a prototype that can be filed tested will be complete in order to transition into the final stage and complete our proof of concept.

## Semester [i.e. Spring 2015] Task Description

Insert Gantt chart (excel file found on Catcourses in reports folder) with each task that is necessary to reach each milestone for each sub-team or the team as a whole. Tasks should be SMART (Specific, Measurable, Action Oriented, Realistic, and Time Sensitive).

Write a short paragraph describing each task. Task descriptions should be SMART (Specific, Measurable, Action Oriented, Realistic, and Time Sensitive).

* State the start time
* Define the task
  + Include specific details of how to complete task
* How does this task help to meet the milestone deadline or semester goal?

Example:

By week four, the team will complete the training phase of the project. This includes setting up Eclipse and the Java training Basic output, Input/Output, Data Types, Expressions, and Basic Control Flow. This will allow the team to move forward and work on the main code’s reliability.

By week four, the team will download Slack and GitHub. This includes creating an account for Slack and being able to open the code on GitHub. This is important because it allows the team to communicate and work outside of class.

By week three, the team will complete the task of contacting our client. This means Velocity Track team will email Mr. Boykin to arrange a meeting. This will ensure that the team is moving forward in the right direction.

By week four, the team will complete the project charter task. This includes approvals and signatures from the Community Partner, the Team Leader, and the Faculty Adviser. This will ensure that the team has an agreement with our clients. This document will be uploaded to the Phase Specification Development folder on the box.

By week seven, the team will complete the meeting with client task. At the meeting, the team will provide a project update and solicit feedback from the client about how useful the project is. This will ensure that the team is designing a project that will be useful to the client. Delivery Review document will be uploaded to the Phase Delivery folder on the box.

## Semester [i.e. Spring 2015] Team Member Assignments

Insert a list of the team members and the specific tasks they will be working on this semester from section 2.4 (list the names of tasks from Gantt chart).

**Example:**

Bobby Brown: Bobby will be working on [task name 1], [task name 2], [task name 4] …

Janis Joplin: Janis will be working on [task name 2], [task name 12], [task name 34] …

Example:

Justin Hicks will be working on the project charter, the design failure mode and effect analysis, and the delivery review.

Miriam Barlow will be working on the project charter, the field-testing, and the usability and reliability testing.

Martha Conklin will be working on contacting Mr. Boykin, the design and analysis evaluation of the project, and the delivery review.

YangQuan Chen will be working on the design analysis and evaluation of the project, field-testing, and usability and reliability testing.

Tom Hothem will be working on the project charter, the design failure mode and effect analysis, and the delivery review.

## Semester [i.e. Spring 2015] Proposed Semester Budget

Insert the expected budget for the current semester through a table or a figure listing the major categories of the budget (i.e. travel, project supplies, training, etc.). DO NOT INCLUDE SPECIFIC DETAILS OF ITEMS YOU PROJECT TO PURCHASE IN THE TABLE.

Include a summary of the budget and how the categories or purchases will benefit the project and to meet the milestones or semester goal. Budget categories may include costs associated with materials, travel, and other expenses associated with the project. Only include specific examples of items to purchase as an example. The budget should reflect the costs associated with the semester goal.

**EXAMPLE:**

|  |  |
| --- | --- |
| **Item** | **Cost** |
| FAA License | $150 |
| Travel | $300 |
| Project Materials | $200 |
| TOTAL | $650 |

The total budget for this semester is $650. The new pilot will need an FAA pilot license, which will cost $150. Travel will cost around $300, for going to any off campus events or to meet clients, and to visit the farm. Project materials are anticipated to cost $200 for things such as batteries, rotors and the camera mount.

# References

**CITE WHERE YOU GOT YOUR INFORMATION**

Include a reference section for any articles, webpages, or resources used in the proposal. Only provide a reference for cited materials.

(See [Lynda.com Word training](http://www.lynda.com/Office-tutorials/Working-citations/167073/363718-4.html))

Examples of how to write citations for a wide variety of publication sources are at:

<http://library.ucmerced.edu/research/citing-sources>

For guidelines and examples of how to cite web pages and other information obtained from electronic sources, see:

<http://www.loc.gov/teachers/usingprimarysources/citing.html>

<http://www.beadsland.com/weapas>