

MET 352 Engineering Design
Department of Materials and Metallurgical Engineering
South Dakota School of Mines and Technology

Assignment 5: Project Plan - Necessary Elements

Submit digitally before 11:00 pm Monday 2-25-19

1. **State the problem/Goal:** Write a clear, concise statement summarizing your view of the problem for which you are designing a solution. [UPDATE]
2. **Identify your customers/stakeholders:** Provide a brief statement specifying your customer/stakeholders for this project. [UPDATE]
3. **Determine customer requirements, both needs and expectations:** Write a paragraph indicating the requirements, needs and expectations you have identified at this time. Keep in mind, good requirements should be achievable, verifiable, unambiguous, complete and consistent. [UPDATE]
4. **Identify cost, schedule and performance constraints:** Provide a brief statement specifying your cost schedule and performance constraints. [UPDATE]
5. **Identify Smaller Tasks:** As a group, breakdown your semester into several tasks. Clearly define each task as well as any subtasks as follows:
 - a. Set a schedule for the task
 - i. Start? Finish? Any key checkpoints? Micro-schedule?
 - b. Identify the resources?
 - c. What is the output of this task?
 - i. How will you know when this task is completed?
 - d. What does the task need?
 - i. Long-lead items: Are there any long-lead items needed for completion of this task?
 - ii. Are there any tasks that need to be completed before this one begins?
6. **Identify Project Milestones:** As a group, identify your project milestones in terms of timing and content (i.e. what is the milestone?). A good example is your final presentation at the end of this semester.
7. **Develop the Schedule:** As a group assemble all of the timelines/schedules and key dates from your smaller tasks and milestones into a “master” schedule. Please use a Gantt chart to display your schedule.
8. **Identify Risks:** Provide a list of the risks you are currently aware of for your project. These risks are items that may prevent your team from accomplishing your defined goal(s) and can be schedule, technical or budget related.