Writing a Statement of Work

ME 4054W Design Projects

January 26, 2012
What is a Statement of Work?

- A Statement of Work (SOW) explains the *what*, *why* and *how* of a project, before it starts.
- In this course, it is a contract between the team and the advisor that describes the work that the team will do.
- The advisor must approve the SOW and the other elements of the project plan, so it is critical that they be involved in the creation of these documents.

See the “Statement of Work” page in “Assignments” on the course website
What is in a Statement of Work?

• The Statement of Work has four sections:
   Background
   Scope
   Tasks
   Deliverables
Many riders who are injured in motorcycle-related accidents have a desire to return to riding motorcycles. The primary objective of this project is to design and modify a motorcycle to be usable by one such paraplegic rider. Paraplegic riders require a stabilization mechanism for low-speed and stopped conditions, as well as some modified controls. This project will offer one solution that will be applicable to more than one motorcycle design or model. The functional prototype will be used by the customer this summer for a cross-country trip.
Scope

The team will design, prototype, test, and build a stabilization mechanism for use on a donated 1986 Suzuki GSX-R 750. ..... After developing this mechanism, the team will install it along with a commercially available hand-operated shifter and associated user interface.

✓ Describes what will and won't be done on the project.
✓ Does not refer to specific tasks or deliverables.
Tasks

The tasks of the modification include:

1. A stabilization mechanism for use at low speed or during stopped conditions. The team will **research current designs, develop and select a concept, then model it in 3D** and analyze the performance using finite element analysis before **building and testing final prototype**;

2. Xxx

3. Xxx

4. Aesthetically pleasing design that is virtually inconspicuous when not in use, **to be verified by customer feedback**.

✓ Defines the 4-5 major tasks that the design team will undertake during the project, and the approach that the team will take on the tasks. The purpose of this section is to describe the work plan for the team.
Deliverables

A completely retrofitted and functional motorcycle is the primary deliverable for the Senior Design Show on May 5, 2009. This includes the donated motorcycle with the functional stabilization, shifting, and user interface, in addition to proper documentation of the systems designed and integrated...

- Project deliverables to the advisor (with specificity)
- If documents, include title, contents and purpose
- If an apparatus, include purpose, capabilities
- Artist rendering can be useful
SOW Tips

• Use simple words and sentences. No jargon.
• Be concise. No gratuitous or extraneous words.
• Use active rather than passive voice.
• Define technical terms.
• Be specific.
• Use figures, diagrams and images to make your point.
• Include page numbers, document date, authors' names.
• Review carefully to eliminate typos (use multiple sets of eyes).
• Read out loud to yourself to confirm what you’ve written sounds good.