

# Colorado School of Mines—EPICS 151

## Guidelines for Project Proposal F-16

***The Project Proposal is a presentation “pitch” of your best ideas to your mentor/manager. The presentation includes demonstrations of physical artifacts (rough prototypes) to help you communicate your ideas to the audience.***

### 1. Purpose

To request management permission to move forward with your best idea.

### 2. Format of Design Proposal oral presentation (**TEAM ASSIGNMENT**)

All team mates will present. Accompanied by hand-sketches and looks-like prototypes. Includes:

- Team and team member introduction, mentioning purpose of presentation
- Your team’s problem definition and key stakeholders
- Presentation of 5\* DIFFERENT and compelling alternatives, each with hand-graphics that are:
  - Labeled. Include a reference scale for sketches and CAD.
  - A launch pad to the accompanying looks-like prototype.
  - Easy to see from the audience.
- May also include CAD and photos, but focus on hand sketches.
- Explanation of decision analysis tools used both to choose your best alternatives and to select your preferred option.
- Presentations and demonstrations of your looks-like prototypes to support the visualization of your idea.
- Your proposed final design, and why.
- Your proposed project plan, indicating major deliverables and tasks, and clearly showing responsibilities
- Summary: thank you, call for questions, and request to move forward.
- All claims must be backed up. Scholarly and authoritative online sources qualify, as do subject matter expert talks, interviews with stakeholders, and personal user empathy experiences. Include a citation slide listing 5+ of these sources. IEEE formatted citations (*posted on BB*).

General:

- Plan for 9-10 minutes, including prototype demos, with Q&A after.
- Practice: smooth hand-offs, and finish on time.
- All decisions backed up with research and experience. Cite your research and sources.
- All text and graphics legible and understandable from audience seats.
- Clear and concise with the proper level of formality.

\* 5 concepts presented for 5-member teams, 4 for 4-member teams, etc.

### 3. Accompanying Looks-like prototypes (**INDIVIDUAL ASSIGNMENTS – each member makes one**)

- Your prototypes must help further the audience’s understanding/visualization of your best concepts, beyond your hand-sketches.
- They should demonstrate the distinctive / unique elements of your solution.
- Prototype demos should be brief but informative, and worked into the flow of the presentation.
- Prototypes must show actual constructive work. Bringing in an off-the-shelf item and hand-waving will not suffice.
- Prototypes must provide some hint of setting or scale. Consider this in the design of your prototype.

- It is okay if the quality of the underlying concepts differ across the team; the prototype will be graded on its own implemented merit. If you don't like the concept you are prototyping, work for a better concept.

