

GE105 Introduction to Engineering Design College of Engineering King Saud University

Studio 7.

Practicing Problem Formulation

FALL 2016

Formulating your Final Design Project

- Today's activity is what you will be presenting orally next week (5-7 min./group); so do it right!
 Your 2nd oral presentation next week must include a complete problem formulation:
 - ✓ Well chosen descriptive title
 - Need analysis
 - ✓ SMART objectives
 - Constraints
 - Criteria
 - Human factors*

Todays Activity (Part one: 45 minutes)

- Perform a group discussion with your team members to formulate your final design project
- Start with: "we will design-----to perform ------"
- Choose a proper title (up to 10 words)
- Answer the following questions: What? How? Why?
- Draw the objectives tree
- Assess needs
- Identify at least one primary objective
- Identify at least one secondary objective
- Identify at least 4 constraints and 4 criteria
- Identify human factors issues in your design*

Todays Activity (Part Two: <u>30 minutes</u>)

- Each group reads out the results of their discussion
- Other groups are expected to criticize/evaluate