

GE-105 Section 09, CRN: 36106/7/8 First Semester 1438-39 H (Fall-2017) – 2(1,1,2) "Introduction to Engineering Design"

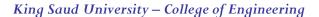
Saturday, October 21, 2017 (01/02/1439H)

Report - Stage 1: Topic Proposal

# Names:	Student Numbers:
1.	43
2.	43
3.	43
4.	43

You are requested to write a one-page proposal regarding your chosen topic for the project. The proposal should contain the following criteria [10 points each]:

- 1. **Title page**: clear title (descriptive, <10 words), course name, authors' full names & ID's, instructor name, date of submission
- 2. **Proposed concept**: i.e. what you are suggesting to do; include a *labeled* sketch of your concept; show what your design can do and how it works; what problem does it solve?
- 3. **Motivation**: what similar items have you seen that inspired this idea (from Internet, market, personal experience, etc.); use photos/sketches and show why yours is better/different
- 4. **Introduction**: motivation for project; some previous work with photos
- Report: formatting (e.g. 1" margins, 1.5 spacing, standard font sizes and typeface, titles/subtitles), organization, spelling, grammar (e.g. no fragments, run-on sentences), thoroughness, quality (e.g. all sentences, not all bullets)
- 6. **Referencing**: citing within text (of sources, figures, tables); use of sources other than websites; no plagiarism (copy-and-paste); unified/standard system of referencing; complete and correct references; every reference is cited in the text and vice versa
- Figures/tables: caption and number for every figure/table; reference number at the end of the caption (for external source); complete and correct figure captions (below) and table captions (above)
- 8. Problem statement, Need Analysis, Objectives (primary, secondary)
- 9. Criteria, Constraints, Requirements/Specifications
- **10.** Human Factors: specify category and description
- 11. Problem Formulation: one paragraph (summarizes 8-10)
- 12. Design Concept Generation: specify how (brainstorming, morphological analysis, etc.)
- 13. Design Evaluation/Selection: weights and rates (specify scenarios, criteria, etc.); analysis
- 14. Detailed Design: labeled design, with dimensions and sections, etc.





15. Project Planning / Gantt Chart

16. Conclusions, summary and recommendations: what has been done; features and limitations of design; implications of work done; recommended follow-up study

TOTAL: / 160

Rules:

- You should work with your **project group** for this assignment.
- The answer should not exceed **one page** in length.
- Your work must be typed and written in proper English.
- Make sure to use properly captioned figures/tables (where applicable) and to properly cite all utilized references.
- Due date: **Wednesday, October 25, 2017** (05/02/1439)