

# EDSGN 100 INTRODUCTION TO ENGINEERING DESIGN

FALL 2014

## Guidelines for the project report of the 1<sup>st</sup> design project (i.e., the Dumping Maker Project):

1. The project report must include (but not limited to) the following items (**Note:** *We do not seek to limit your creativity in documenting your project, merely to define some minimal information that must be provided when someone first accesses your project page.*):
  - (1) A cover page indicating the design title (large font size), course number and name (normal/small font size), section number, team number, team photo, submitted by and submitted to (with URL links to the person's website, a descriptive image (photo of the prototype or CAD model) of the final design on the lower right corner (including labels if necessary), and date of submission. **Please type the URL/web address of your online project report on the cover page.** Please save your cover page file as “edsgn100\_fa14\_sectionXX\_teamX\_dp1.pdf”.
  - (2) Abstract (or executive summary) for the report (about 50 words)
  - (3) Table of contents (the report must be easy to navigate) with email links to the author of each chapter
  - (4) Introduction
  - (5) Description of the design task
    - Problem statement
    - Mission statement
    - Design specifications
  - (6) Design approach
    - Project management - Gantt chart
    - Customer needs assessment
    - Concept generation
    - Design selection matrices
  - (7) The final design and its prototype
    - A complete set of working drawings of your final design
    - Prototype scale and a digital image(s) of your prototype
    - Design features
    - Operation instructions
  - (8) Engineering Analysis
    - Working mechanism (how your designed device works)
    - Cost analysis
  - (9) Summary and conclusions (or Conclusion and suggestions)
  - (10) Acknowledgement (if any)
  - (11) References (if any)
2. The project report must be published on the web before 11:00 a.m. on or before **October 27, 2014.**
3. **A hard copy** and **an email** with a subject “Section No. Team No.” indicating the URL of the lab report should be submitted to the instructor no later than 5:00 p.m. on the date specified on item 2 above for each section.

4. Please indicate the contribution each team member made to the lab report by placing the member's name on the part he/she wrote.
5. Individual grades may be different from team's grade depending on the member's contribution and effort.
6. Use the following formats for labels and captions of figures and tables:  
**Table 1. Design Matrix**  
**FIG. 1. Image of Prototype**
7. Use the following formats for reference lists:

Dixon, J. R. (1991), "Engineering Design Science: New Goals for Education," *Mechanical Engineering*, 113 (3)

Cheng, F. H. (1985), *Statics and Strength of Materials*, Macmillan publishing Company, NY.

Coduto, D. P. (1994), *Foundation Design - Principles and practices*, Prentice Hall, NJ.

Horenstein, M. N. (2002), *Design Concepts for Engineers*, Prentice Hall, Upper Saddle river, NJ.