Guideline for the End-of-Semester Student Presentation (Presentation #3)

(the number in the parenthesis shows a suggested number of slides on each topic)

Slide 1 (1): Title page

Project Title ME195B Group members' names Instructor's name "Mechanical & Aerospace Engineering Department" "San Jose State University" Date

Slide 2 (1): Outline

Motivations Literature review and/or Market Survey Objectives and Specifications XX Design and XX Methodologies XX Simulation Results Conclusions Future work

Slide 3 (3): Motivations and Backgrounds (Why do it, what is its significance/impact)

Slide 4 (4): Literature review (other people's similar work, disadvantages/advantages)

Slide 5 (2): Objectives and Specifications (What you will do, What to expect uniqueness of your project,

and specifications that define the parameters and performance of your final product – e.g.

dimension, speed, weight, response time, operating condition, accuracy etc.)

Slide 6 (5): Initial and final designs (you can talk about your different designs and how you reach your

final design with graphics using computer drawing tools, no hand drawings; key components

design or selections)

Slide 7 (3): Theories and physical principles behind your designs (with equations, mathematic models,

calculations, simulations, etc.)

Slide 8 (3): (If applicable) Electronics -- e.g., circuits, microcontroller, sensors, control systems used in your product (how do you design, select, test, and tune them to meet your need)

Slide 9 (3): Provide descriptions for your simulations such as boundary conditions, scenarios etc. and

simulation results and system performance analyses (using contour plots, curves, data, tables etc.)

Slide 10 (3): Prototype / Proof-of-concept – building, assembly, challenges.

Slide 11 (1): Video show (all groups need to show your working device in video)

Slide 12 (1): Conclusions (Technical conclusions on how your final design meets your specifications and objectives; comment on which things work or don't work)
Slide 13 (1): Valuable experience gained from ME195A&B and challenges
Slide 14 (1): Future work/ improvement
Slide 15 (1): References

Slide 16 (1): Acknowledgment (sponsored company/organization, individuals, etc.)

A total of 20-22 minutes presentation, plus 5 minutes questions.

Dressing Code: Formal

Notes:

- (1) The number in () means the maximum recommended number of the slides for that title.
- (2) When preparing your slides, please be specific for each title of your slides (e.g., indicated by XX) and avoid using generic titles. For example, use "Multi-finger Robot Design with Rotary Driven Mechanism" instead of a genetic title "Design and Methodologies".

<u>Recommendation</u>: upload your final presentation slides (with links to the videos and simulations) to your laptop prior to your presentations – just in case anything happens. Also prepare a 2nd laptop for presentation in case the first one has issues