

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

(The number in the parentheses shows a suggested number of slides on each topic.)

Slide 1 (1): Title page

Project Title
ME195B
Group members' names
Instructor's name
"Mechanical 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)

Note that any material taken from others must be acknowledged appropriately with proper citations.

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, mathematical 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 needs)

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 (2): Prototype / Proof-of-concept – building, assembly, challenges.

Slide 11 (1): Video show (all groups need to show their working device in the 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): Ethical, Societal, health, safety, environmental, and economic considerations related to your project

Slide 14 (1): Valuable experience gained from ME195A&B and challenges

Slide 15 (1): Future work/ improvement

Slide 16 (1): References

Slide 17 (1): Acknowledgment (sponsored company/organization, individuals, etc.)

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

Dressing Code: Formal

Notes:

- (1) The number in () means the maximum recommended number of 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 generic title “Design and Methodologies”.

Recommendation: Upload your final presentation slides (with links to the videos and simulations) to your laptop before your presentations – just in case anything goes wrong. Also, prepare a 2nd laptop for presentation in case the first one has issues.