**MECE 4362 Senior Design II – Final Oral Presentation Rubric: Technical v2**

**Team Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Reviewer\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_**

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| **Presentation****Component** |  **Expert** **(10 points for each)** | **Practitioner****(8 points for each)** | **Apprentice****(6 points for each)** |  **Novice****(4 points for each)** |
| **Background Research**Score: \_\_\_\_\_\_ | * Correctly identified **all** major sources of relevant work both in industry and the academy
* Demonstrated a thorough understanding of the related technology
 | * Correctly identified **most** major sources of relevant work both in industry and the academy.
* Demonstrated a good understanding of the related “prior art”
 | * Correctly identified **some** of the major sources of relevant work both in industry and the academy.
* Demonstrated some understanding of the “prior art”
 | * It appears as though ten minutes was spent on a search engine.
* Appreciation of the technical context of the project clearly not demonstrated
 |
| **Problem Solving****(UPSE)** Score:\_\_\_\_\_\_ | * Can identify appropriate process, theory, or tools for solution
* Able to formulate & solve
* Able to evaluate and contextualize solution
 | * Can identify appropriate process, theory, or tools for solution
* Able to formulate
* Able to solve
 | * Can identify appropriate process, theory, or tools for solution
* Able to formulate
 | * Can identify appropriate process, theory, or tools for solution
 |
| **Analytical Skills Shown by Applying Math, Science, & Engineering Tools**Score:\_\_\_\_\_\_ | * Employed appropriate analytical techniques (both fundamental and advanced) acquired in the curriculum to the project at hand.
* Clearly demonstrated mastery of several areas of the curriculum
* Able to propose innovative solutions.
 | * Employed appropriate analytical techniques (both fundamental and advanced) acquired in the curriculum to the project at hand.
* Clearly demonstrated mastery of many areas of the curriculum
 | * Employed appropriate analytical techniques (both fundamental and advanced) acquired in the curriculum to the project at hand.
* Demonstrated adequate command of some areas of the curriculum
 | * Did not make use of analytical techniques relevant to the project
* Did not demonstrate requisite command of the material covered in the curriculum
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| **Application of MSE Software**Score:\_\_\_\_\_\_ | * Made use of **all** appropriate and available software
 | * Made use of **most** appropriate and available software
 | * Made use of **some** appropriate and available software
 | * **Did not** make use of appropriate available software
 |
| **Design & Analysis**Score:\_\_\_\_\_\_ | * Presented sufficient steps of the various analyses to easily follow development (including assumptions made)
* Analyses **always** illustrated with clearly related charts, tables, figures, & equations
 | * Presented sufficient steps of the various analyses to easily follow development (including any simplifying assumptions made)
* Analyses usually illustrated with clearly related charts, tables, figures, & equations
 | * Presented sufficient steps of the various analyses to follow development though often difficult
* Analyses seldom illustrated with clearly related charts, tables, figures, & equations
 | * Did not present sufficient steps of the various analyses to follow development
* Analyses not illustrated with clearly related charts, tables, figures, & equations
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| **Experimental Details**Score:  | Details of Experimental setup including clear sketches, figures, & pictureClear description of purpose & objectives | Description of experimental setups & some sketchesIncomplete description of purpose & objectives | Inadequate description of experimental methodLimited info relating setup & objectives | No information about experimental setupNo figure or sketch r picture |
| **Data Collection & Analysis**Score: \_\_\_\_\_ | Detailed discussion of measurement techniquesDetailed & clear analysis of data | Data presented but not the techniques used | Limited data without any analysis | No data or any analysis |
| **Design Summary**Score:\_\_\_\_\_\_ | * Presented **all** design details including; figure with dimensions, material selections, member loading and safety, costs, etc.
 | * Presented **most** design details including; figure with dimensions, material selections, member loading and safety, costs, etc.
 | * Presented **some** design details including; figure with dimensions, material selections, member loading and safety, costs, etc.
 | * Presented **few if any** design details including; figure with dimensions, material selections, member loading and safety, costs, etc.
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| **Recommendations** Score:\_\_\_\_\_\_ | * Demonstrated an **acute awareness** of the state of their design relative to the potential for an optimal one

 | * Demonstrated **good awareness** of the state of their design relative to the potential for an optimal one
 | * Demonstrated **some** awareness of the state of their design relative to the potential for an optimal one
 | * **Did not** demonstrate awareness of the state of their design relative to the potential for an optimal one
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| **Handling of Questions**Score:\_\_\_\_\_\_ | * Demonstrated full knowledge of the material; explained and elaborated on expected questions
 | * Demonstrated sufficient knowledge of the material to answer expected questions
 | * Demonstrated difficulty answering expected questions beyond a rudimentary leve
 | * Demonstrated an inability to answer expected ques
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**Comments below:**

Reviewer Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Content adapted from “UPenn