**Asia Pacific College**

**School of Engineering**

**Methods of Research**

**Proposal Defense Grading Rubrics (Panel)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SCHEDULE** | | **Proponents** | **PROPOSED TITLE** | **Client :**  Engr. Leonardo A. Samaniego, Jr. |
| **Date:**  **September 14, 2024**  **Time : 11am - 12pm**  **Room : AIRHub** | | Keanu Zebadiah P. Geronimo | **Technical Title:** | **Chair :**  **Engr. Stanley Glenn E. Brucal** |
| Dorothy Stelrose G. Lorenzo | **Lead Panel :**  **Engr. Luigi Carlo M. De Jesus** |
| X | **Proposal Defense-1**  ***(Midterm period)*** | Ma. Veronica M. Tirol | **Member 1 :**  **Engr. Einstein D. Yong** |
| X | **Proposal Defense-2**  ***(Final term period)*** |  | **Short Title:** | **Member 2 :**  **Engr. Sergio R. Peruda, Jr.** |

1. **Comments:**
2. **For revisions**
3. **Additional requirements**
4. **Grading Rubrics:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PANELIST GRADING RUBRICS**   |  |  |  |  | | --- | --- | --- | --- | | **7** | Exceptional | **6** | Very Good | | **5** | Good | **4** | Satisfactory | | **3** | Needs Improvement | **2** | Incomplete | | **1** | Undesirable | **N/A** | Not Applicable | | | | | | | | | | | |
| **Methods and Procedure** | | **7** | **6** | **5** | **4** | **3** | **2** | **1** | **N/A** | **REMARKS** |
| **A.1 Functions** | Functions are well-defined and categorized. Side-effects and prerequisites are indicated and addressed. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **A.2 Means** | A way or method to make a function happen. It is often expressed in very specific terms that, by their nature, are solution-specific. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **A.3 Design Specification** | It presented in three forms that represent different ways of formalizing a design’s functional performance and its features and behaviors for engineering analysis and design (Prescriptive, Procedural, Performance) | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **A.4 Design Concept** | The preferred design is selected and evaluated using appropriate metrics. Prescriptive, procedural and performance specifications are clearly stated. Clear interface performance specifications are also provided. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **A.5. Operation and**  **Testing Procedure** | The systematic process in which they will follow on how they will design, construct, develop, and test the project. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **A.6 Evaluation Procedure and Criteria** | The systematic process in which they will follow on how they will assess and evaluate their project base on the objective metrics | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **A.7 Gantt Chart and**  **Work Breakdown**  **Structure (WBS)** | A Gantt chart illustrates a [project schedule](https://en.wikipedia.org/wiki/Schedule_(project_management)) from the start and finish dates of the terminal elements and summary elements of a [project](https://en.wikipedia.org/wiki/Project).  WBS organizes the team's work into manageable sections. It visually defines the scope into manageable chunks that a project team can understand, as each level of the work breakdown structure provides further definition and detail. |  |  |  |  |  |  |  |  |  |
| **A.8 Budget Proposal** | A representation of the expenses associated with the proposal project. The Budget Justification contains more in depth detail of the costs behind the line items, and sometimes explains the use of the funds where not evident. |  |  |  |  |  |  |  |  |  |
| **Learning Outcomes Assessment** | | **7** | **6** | **5** | **4** | **3** | **2** | **1** | **N/A** | **REMARKS** |
| **B.1 Presentation Skills** | The students presented their proposal in an organized manner. They showed effective presentation and communication skills. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **B.2 Documentation** | The students were able to express effectively their ideas through their documentations. The presentation of ideas is clear, objective, organized and easy to comprehend. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **B.3 Mastery of Content** | They exhibited mastery of the content of their presentation. They were able to answer correctly the questions of the panel. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **B.4 Public Health, Safety, Economic, Environmental, Social and**  **Ethical Considerations** | The students were able to design a solution that regards public health, safety, economic, environmental, social or ethical issues. |  |  |  |  |  |  |  |  |  |
| **B.5 Application of Knowledge** | The students were able to apply appropriately and accurately the knowledge of mathematics, natural science, engineering fundamentals and engineering principles in their design. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **B.6 Testing and Analysis** | The students were able to provide an appropriate testing methodology that will gather, analyze, interpret and synthesize data to validate their design. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |
| **B.7 Reasoning Skills** | The students are able to apply broad reasoning using appropriate and accurate knowledge in creating and assessing their design. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |

At the conclusion of each **defense**, decision of the panel members can be summarized as follows:

**1. CONDITIONAL PASS (WITH REVISIONS/RECOMMENDATIONS**)

This decision is given if the design project panel committee has approved the proposal documentation (containing the problem statement and conceptual design), with some minor revisions, and the students are able to show that they understand the project.  **The verdict should be attested by the group’s rating of at least (4) in all of the criteria from the majority of the panelist (i.e. 3 out of 4, or 2 out of 3).**

Once accepted, the design project topic, general objective, specific objectives, and scope and limitations of design prototype can no longer be changed. The specific objectives established at this stage must be met satisfactorily during the Design Project 1 stage. Design project groups are expected to comply with all the revisions and recommendations stated in **Design Project Agreement Form** and **Revised Design Proposal**. Failure to do so would result to the change of decision from CONDITIONAL PASS WITH REVISIONS/RECOMMENDATIONS to REPEAT (R). Moreover, failure to comply with other requirements and/or deliverable set forth by the Subject Instructor and design project panelists would result in an **R** grade. Significant change in the general objective is not allowed and is tantamount to repeating RESMETH.

**2. REDEFENSE**

This decision is given if the design project panel committee has approved the general objective of the design project during the **Preliminary Defense**. However, the proponents need to conduct further study and clarify the problem statement and/or conceptual design. This decision is also given if the group is not able to show their understanding of the proposed topic. In this case, the students will undergo another defense/presentation of the same topic. **This verdict is given to a group who failed to achieve a rating of at least (4) in all of the criteria, from the majority of the panelist (i.e. 3 out of 4, or 2 out of 3).**

There are two (2) possible decisions from here: CONDITIONALPASS WITH REVISIONS/RECOMMENDATIONS; and REPEAT.

**3. REPEAT.**

This decision is given if the problem statement and conceptual design has been rejected during the **Proposal Defense**. More so, to the design project group who has initially been given a decision of CONDITIONAL PASS (WITH REVISIONS/RECOMMENDATIONS), or REDEFENSE, who failed to submit the required defense deliverables on or before the deadline set by the CPEMETH/RESMETH Instructor. **This verdict is given to a group who failed to achieve a rating of at least (4) in all of the criteria, from the majority of the panelist (i.e. 3 out of 4, or 2 out of 3).**

1. **Panel Recommendation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

*(Refer to the statement above for the list of possible verdicts. Grades to individual member to be recommended by the official panel member composed of chair, lead panelist and one member.)*

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

***SUMMARY OF RATINGS*** *(This portion is to be accomplished by the CHAIR. The final verdict of the Chair is considered final and irrevocable after the deliberation*.***):***

***(Provide this copy to the chair only)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Preliminary Defense Documentation**  **(*MIDTERM*)** | | **Chair** | **Lead Panel** | **Member 1** | **Member 2** | **AVERAGE** |
| A1 | **Functions** |  |  |  |  |  |
| A2 | **Means** |  |  |  |  |  |
| A3 | **Design Specification** |  |  |  |  |  |
| A4 | **Design Concept** |  |  |  |  |  |
| A5 | **Operation and Testing Procedure** |  |  |  |  |  |
| A6 | **Evaluation Procedure and Criteria** |  |  |  |  |  |
| A7 | **Gantt Chart and Work Breakdown Structure (WBS)** |  |  |  |  |  |
| A8 | **Budget Proposal** |  |  |  |  |  |
| **Learning Outcomes Assessment** | |  | | | | |
| B1 | **Presentation Skills** |  |  |  |  |  |
| B2 | **Documentation** |  |  |  |  |  |
| B3 | **Mastery of Content** |  |  |  |  |  |
| B4 | **Public Health, Safety, Economic, Environmental,**  **Social and Ethical Considerations** |  |  |  |  |  |
| B5 | **Application of Knowledge** |  |  |  |  |  |
| B6 | **Testing and Analysis** |  |  |  |  |  |
| B7 | **Reasoning Skills** |  |  |  |  |  |
| **OVERALL RATING** | | | | | |  |

1. **Chair Recommendation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

*(Refer to the statement above for the list of possible verdicts. Grades to individual member to be recommended by the official panel member composed of chair, lead panelist and one member.)*

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**