Research Presentation Rubric

ISYE 348 Fall 2024

Aakash (@nimRobotics)

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This presentation will be done in class on 2024-12-02. Each group will have 8 minutes to present their research project and 3 minutes for Q&A. The presentation will be graded on **30 points** based on the following criteria:

Research Foundation (6 points)

Criterion	0 points	1 points	2 points
Problem Statement & Background	Missing or irrelevant background	Basic context and problem statement provided	Comprehensive background with clear justification of research need
Research Question & Hypothesis	Not clearly stated or missing	Present but poorly connected to background	Clear, well-justified, and logically flows from background
Literature Integration	No reference to existing research	Basic mentions of previous work	Thoughtful integration of relevant literature and clear identification of research gaps

Methodology (10 points)

Criterion	0 points	1 point	2 points
Research Design	Missing or inappropriate	Basic design outlined	Clear, appropriate design with justification
Participant Selection	Not addressed	Basic sampling plan	Comprehensive sampling strategy with justification

Criterion	0 points	1 point	2 points
Variables & Measures	Missing or unclear	Basic description	Clear operational definitions and measurement plans
Data Collection Procedures	Not described	Basic procedures outlined	Detailed, replicable procedures
Analysis Plan	Missing or inappropriate	Basic analysis mentioned	Appropriate and detailed analysis plan

Results & Implications (6 points)

Criterion	0 points	0.5 point	1 points
Expected Outcomes	Not addressed	Basic predictions	Well-reasoned predictions tied to hypothesis
Practical Implications	Missing	Basic implications mentioned	Clear connection to human factors practice
Limitations & Future Work	Not addressed	Basic limitations listed	Thoughtful discussion of limitations and future directions

Technical Communication (3 points)

Criterion	0 points	0.5 point	1 points
Visual Support Materials	Missing or ineffective	Basic visuals included	Clear, informative visuals that enhance understanding
Technical Accuracy	Major technical errors	Minor technical errors	Technically accurate throughout
Clarity & Engagement	Unclear or unengaging	Somewhat clear and engaging	Clear, engaging, and well-structured

Peer Evaluation (5 points)

Peer evaluation will be done for each group member by other group members in the same group.

Criterion	0 points	0.5 point	1 point
Participation	Did not participate	Participated minimally	Actively participated
Contribution	No contribution to group work	Minimal contribution	Contributed significantly to group work
Collaboration	Did not collaborate effectively	Somewhat collaborated with the group	Collaborated effectively with the group
Communication	Poor communication with group members	Adequate communication with group members	Effective communication with group members
Time Management	Poor time management	Adequate time management	Effective time management

Required Content by Slide:

1. **Introduction (2-3 slides)**
   - Clear problem statement
   - Relevance to human factors
   - Key background research
   - Research gaps identified
2. **Research Question & Hypothesis (1-2 slides)**
   - Clear research question
   - Specific hypothesis/hypotheses
   - Theoretical justification
3. **Methodology (3-4 slides)**
   - Research design overview
   - Participant details
   - Variables and measures
   - Procedures
   - Equipment/materials
   - Data collection plan
   - At least one figure or diagram
4. **Expected Results (1-2 slides)**
   - Predicted outcomes
   - Analysis approach
   - Potential alternative outcomes
   - At least one plot or figure [expected results]
5. **Implications & Limitations (1-2 slides)**
   - Practical applications
   - Theoretical contributions
   - Known limitations

- Future research directions

[# slides are provided as a guideline and can be adjusted based on content distribution]