

### Recommended Rubrics for Evaluating Collaborative Research Projects

Category	Quality			
	Exemplary (90-100%)	Proficient (80-90%)	Developing (60-80%)	Needs Improvement (0-60%)
Research Problem and Objectives (5%)	Clearly defines the research problem with a thorough understanding of its significance. Objectives are well-articulated, achievable, and align with the research problem.	Defines the research problem and objectives adequately, with minor gaps in clarity or relevance.	The research problem and objectives are somewhat defined but lack clarity, focus, or alignment.	The research problem and objectives are vague, poorly defined, or unrelated to the field of study.
Literature Review and Background (5%)	Comprehensive review of relevant literature with insightful analysis and clear connections to the research problem. Demonstrates a strong understanding of the background.	Adequate literature review with relevant sources and a reasonable connection to the research problem.	Limited review with gaps in coverage or unclear connections to the research problem.	Insufficient or irrelevant literature review that does not support the research.
Methodology and Implementation (25%)	The methodology is well-designed, appropriate, and rigorously executed. Implementation demonstrates technical expertise and innovation.	The methodology is sound and mostly appropriate but may have minor flaws or inconsistencies in implementation.	The methodology is partially developed or applied inconsistently. Implementation shows basic technical competence but lacks depth.	The methodology is poorly designed or inappropriate, with minimal or incorrect implementation.
Results and Analysis (20%)	Results are clear, relevant, and well-analyzed with appropriate techniques. Insightful interpretations are provided.	Results are relevant and analyzed with reasonable techniques, but interpretations may lack depth.	Results are presented but lack clarity, depth, or proper analysis.	Results are unclear, irrelevant, or insufficiently analyzed.
Presentation and Communication (25%)	The project is presented clearly and professionally, with strong visual aids, effective delivery, and logical structure. All team members contribute.	The presentation is clear and organized but may lack polish or have minor inconsistencies.	The presentation is somewhat clear but lacks organization or effective delivery.	The presentation is unclear, disorganized, or lacks participation from team members.
Originality and Innovation (10%)	The project demonstrates a high level of creativity and originality, with innovative approaches or solutions.	The project includes some creative or original elements but relies on conventional approaches.	Limited originality, with a standard or predictable approach.	Lacks originality, relying heavily on existing work without adding new insights.
Balanced Contribution (10%)	Team members effectively collaborate, with clear roles, balanced contribution, and consistent communication.	Team members generally collaborate well, with minor imbalances in workload or communication issues.	Some evidence of collaboration, but there are significant issues with workload distribution or communication.	Minimal collaboration, a small number of team members dominate the contribution

- As a project team, you are responsible for demonstrating and persuading the graders of the quality of your project regarding each of the categories outlined above.
- As a judge, please follow the rubric closely when judging each project, we are counting on each of you to perform a fair, professional and thoughtful evaluation.

## Grading Form

Category	Grades										
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10	Average
Research Problem and Objectives (5%)											
Literature Review and Background (5%)											
Methodology and Implementation (25%)											
Results and Analysis (20%)											
Presentation and Communication (25%)											
Originality and Innovation (10%)											
Balanced Contribution (10%)											
<b>Total:</b>											
Signature From All Team Members											
Date											

- You are not allowed to grade your own group.
- Please begin by grading each project individually. Then, discuss your evaluations with your group members, reach a consensus.
- Please ensure that the average "Total" grade **among all groups (except yours)** is no higher than 90 out of 100. Failure to comply will result in your grading being disregarded.
- In your final group-agreed submission, please report only the "Total" grade for each project and the average "Total" grade across all projects.
- Thank you all for your hard work on both the project and the evaluation process!