AoCMM Online Competition
October 4-18, 2016

Paper Scoring Rubric

Control Number: 841

Problem 1

Criteria	**Strong**	**Medium**	**Poor**	*Points*
Summary Sheet: Interpretation of Contest Problem	Clear background, restates the problem and specifies focus areas of the paper; easy to find and is consistent throughout the paper ***(5 points)***	Mentions the problem, some goals are mentioned and consistently followed ***(3 points)***	Problem not restated or hard to find **(*1 point)***	5/5
Summary Sheet: Overview of Methods	Indicates the methodology used, as well as their purposes in a chronological fashion; easy to understand and not too technical ***(10 points)***	Methods stated, but is unclear and difficult to understand ***(6 points)***	Methods barely or not mentioned with no explanations given ***(1 points)***	10/10
Summary Sheet: Statement of Conclusions	Important results that directly answer the problem are included without becoming too specific, possible strengths and weaknesses mentioned ***(10 points)***	Results included, but not clear and/or too technical ***(6 points)***	Few or no results, strengths and weaknesses not mentioned ***(1 points)***	9/10
Solution: Assumptions/ Justifications	States why assumptions are made, how to justify them, and how they might limit the model ***(5 points)***	More than 25% of the solutions section do not meet the criteria, some major assumptions are mentioned ***(3 points)***	More than 50% do not meet the criteria, major assumptions are left out ***(1 point)***	5/5

Solution: Usage of Method(s)	Method(s) are used correctly, efficiently, and effectively for solving the problem ***(10 points)***	Method(s) are used correctly but do not return a reasonable result or are inefficient for solving the problem ***(6 points)***	Method(s) are incorrectly utilized ***(1 points)***	9/10
Solution: Explanation	All variables are clearly labeled, solution has detailed, accurate, and concise mathematical explanations for each step ***(25 points)***	Presentation of solution is somewhat detailed, accurate, and concise, graphs and illustrations are explained ***(16 points)***	Poor labeling of variables, presentation is vague/unclear and long winded ***(5 points)***	16/25
Solution: Supporting Figures and Graphics*	Graphs are pleasing and straightforward, using *enough* graphs to explain the model **(5 points)** *If no graphs are presented and the explanation is sufficient without graphs, the "solution: explanation" section will be worth 30 points.	Some graphs are hard to understand and/or simply unnecessary **(3 points)**	Graphs are poorly constructed **(1 point)**	4/5
Solution: Sensitivity/ Stability	Shows how the model responds to change in assumptions or parameters, thoughtfully accounts for and explains any possible errors ***(5 points)***	Some analysis is present, with little to no recognition of errors ***(3 points)***	Insufficient analysis, none or almost no data presented, error interpretation is non-existent ***(1 point)***	3/5
Solution: Strengths & Weaknesses	States when the model can be used, proposes strengths and weaknesses for each model in an insightful and reflective manner ***(5 points)***	Some comments are not insightful or reflective ***(3 points)***	Not enough strengths and/or weaknesses OR less than 50% of remarks are above par ***(1 point)***	5/5

Conclusion	The purpose, method, and result are clearly listed for each model ***(10 points)***	Summary of results is unclear, but the general idea of the group's findings is present ***(6 points)***	Few or none of the requirements are present ***(1 point)***	8/10
Format	0-1 criteria missing from the following: - Length does not exceed 35 pages - References are clearly represented and sources are correctly cited - Formulas and graphs are plainly labeled - Page number, control number are labeled according to the rules - Paper is enjoyable to read - Appropriate font for code and body - File type (PDF) ***(10 points)***	2-3 formatting criteria missing ***(6 points)***	More than 3 formatting criteria missing ***(1 point)***	8/10
Feedback:				Total: 82/100

Problem 2

Criteria	**Strong**	**Medium**	**Poor**	*Points*
Summary Sheet: Interpretation of Contest Problem	Clear background, restates the problem and specifies focus areas of the paper; easy to find and is consistent throughout the paper ***(5 points)***	Mentions the problem, some goals are mentioned and consistently followed ***(3 points)***	Problem not restated or hard to find ***(1 point)***	5/5
Summary Sheet: Overview of Methods	Indicates the methodology used, as well as their purposes in a chronological fashion; easy to understand and not too technical ***(10 points)***	Methods stated, but is unclear and difficult to understand ***(6 points)***	Methods barely or not mentioned with no explanations given ***(1 points)***	9.5/10
Summary Sheet: Statement of Conclusions	Important results that directly answer the problem are included without becoming too specific, possible strengths and weaknesses mentioned ***(10 points)***	Results included, but not clear and/or too technical ***(6 points)***	Few or no results, strengths and weaknesses not mentioned ***(1 points)***	7.5/10
Solution: Assumptions/ Justifications	States why assumptions are made, how to justify them, and how they might limit the model ***(5 points)***	More than 25% of the solutions section do not meet the criteria, some major assumptions are mentioned ***(3 points)***	More than 50% do not meet the criteria, major assumptions are left out ***(1 point)***	5/5
Solution: Usage of Method(s)	Method(s) are used correctly, efficiently, and effectively for solving the problem	Method(s) are used correctly but do not return a reasonable result or are inefficient for solving the problem	Method(s) are incorrectly utilized	7/10

	(10 points)	***(6 points)***	***(1 points)***	
Solution: Explanation	All variables are clearly labeled, solution has detailed, accurate, and concise mathematical explanations for each step ***(25 points)***	Presentation of solution is somewhat detailed, accurate, and concise, graphs and illustrations are explained ***(16 points)***	Poor labeling of variables, presentation is vague/unclear and long winded ***(5 points)***	17.5/25
Solution: Supporting Figures and Graphics*	Graphs are pleasing and straightforward, using *enough* graphs to explain the model **(5 points)** *If no graphs are presented and the explanation is sufficient without graphs, the "solution: explanation" section will be worth 30 points.	Some graphs are hard to understand and/or simply unnecessary **(3 points)**	Graphs are poorly constructed **(1 point)**	5/5
Solution: Sensitivity/ Stability	Shows how the model responds to change in assumptions or parameters, thoughtfully accounts for and explains any possible errors ***(5 points)***	Some analysis is present, with little to no recognition of errors ***(3 points)***	Insufficient analysis, none or almost no data presented, error interpretation is non-existent ***(1 point)***	4/5
Solution: Strengths & Weaknesses	States when the model can be used, proposes strengths and weaknesses for each model in an insightful and reflective manner ***(5 points)***	Some comments are not insightful or reflective ***(3 points)***	Not enough strengths and/or weaknesses OR less than 50% of remarks are above par ***(1 point)***	3.5/5
Conclusion	The purpose, method, and result are clearly listed for each model ***(10 points)***	Summary of results is unclear, but the general idea of the group's findings is present ***(6 points)***	Few or none of the requirements are present ***(1 point)***	8/10

Format	0-1 criteria missing from the following: - Length does not exceed 35 pages - References are clearly represented and sources are correctly cited - Formulas and graphs are plainly labeled - Page number, control number are labeled according to the rules - Paper is enjoyable to read - Appropriate font for code and body - File type (PDF) ***(10 points)***	2-3 formatting criteria missing ***(6 points)***	More than 3 formatting criteria missing ***(1 point)***	9/10
Feedback to the team:				Total: 81/100

Note:

1. If a team is believed to be intentionally manipulating their results, 25 points will be deducted.
2. Points for each grading criteria may be allocated between the indicated values should a judge see fit. (i.e. Even though "Strong" = 10 points and "Medium" = 6 points, it's possible to give 7-9 points per the judge's discretion)
3. If summary is over 1 page in length, 5 points will be deducted.
4. If a section of the paper exceeds the expectations listed, additional points (up to 20%) may be rewarded for that grading criteria.