Systems Modeling: SYSTEM Stories Paper Scoring Guide

Score	**Report is complete and communicates well** Characteristics:	Comments:
General (15)	Title is in the form of a question.	
	All parts of the report are included and properly formatted.	
	Grammar and spelling are perfect – report is neat.	
	Report flows smoothly and logically.	
	Report would make sense to people who are unfamiliar with the problem specifications.	
Model (10)	Model diagram, equations, tables, and graphs were correct.	
Introduction (5)	Explanation of the problem studied is sufficient to set the stage.	
	Problems encountered are briefly explained.	
Model Explanation (25)	All stocks, flows, and converters are explained.	
	The model is broken down, if appropriate, into sensible subparts to aid in the explanation.	
	All feedback loops are identified and their influence explained.	
	Rationale is provided for the time range, DT, and integration method.	
Graph and Table Explanation (10)	Graphs and tables are used effectively to illustrate the behavior of the variables of interest.	
	Explanations are sufficient for each graph and table.	
	Data displays highlight the stress points (points of interest) and clarify and support the conclusions.	
Validation (20)	An attempt is made to explain how the model created was tested to determine that it met the criteria of the story specifications.	
	Error analysis includes, if possible, a comparison of model values with theoretical or empirical values.	
	There is evidence that the model has been exercised.	
Conclusion (15)	Results are explained according to the structures and features of the model.	
	Conclusion addresses the purpose of the model.	
	Major assumptions and limitations are discussed.	
	The model is evaluated and suggestions for new uses or adaptations are made.	
Total (100)		

Systems Modeling: SYSTEM Stories Model Scoring Guide

Score	**Model is correct and robust** Characteristics:	Comments:
General (10)	Results meet requirements of System Story (**major emphasis).**	
	Simulation time is appropriate.	
	Choice of DT and integration method are appropriate.	
Diagram (25)	Structure is evident (not hidden with complicated mathematics).	
	Diagram is organized to allow easy reading.	
	Specialty items (conveyors, biflows, etc) are used appropriately and *only* when appropriate.	
Equations (35)	Equations are accurate and in simplest format (if-then-else, pulse, etc) so they are easy to understand.	
	Equations are documented.	
	Units are specified and appropriate.	
Graphs (15)	Scales are appropriate (and grouped).	
	Curves chosen for comparison on one grid are appropriate.	
	Graph is clear and easy to understand.	
	Graphs show the problem was solved and allow for evaluation of the model.	
Tables (15)	Table contains all important components that change over the course of the simulation.	
	Time units are specified (not generic).	
	Table organization is helpful (components representing similar/related concepts are organized and grouped).	
	The key points of interest in the model are displayed.	
	Tables allow evaluation of the correctness of the calculations.	
Total (100)		