

IE526 Term Project Guideline

General Requirements:

You are expected to build a simulation model which addresses a real-world problem or work on a research-based project. Discussion with the instructor about your topic is strongly recommended! Prepare a report in the format of the Winter Simulation Conference (WSC) papers or Industrial and Systems Engineering Research Conference (ISERC) papers.

Deliverables:

- Each team will make a presentation and/or demonstrate the model.
- Final report:
 - Refer to the Winter Simulation Conference proceedings. It normally consists of several parts: 1) Introduction and literature review; 2) Problem definition; 3) Analytical results/theoretical models; 4) Simulation configuration and results; 5) Conclusion and discussions.
 - A preferable report tells a story. Keep in mind of the following questions: why do you choose this project; how do you collect, analyze and validate the data; how do you build the model; what does the logic flow look like; how do you verify & validate the model; have you done any sensitivity analysis & output analysis; what conclusion can you draw; what's your suggestion; and so on.
 - Submit the.alp file along with any other supporting files.

Evaluation:

- 70% written report.
- 30% project demonstration & presentation. Note that your classmates will evaluate your work (It counts for 50% of this category. The remaining 50% will be from the assessment of the instructor).

Project Evaluation Criteria:

PROJECT CORING CRITERIA AND WEIGHTS

CHALLENGE FACTOR (LOW, MEDIUM, HIGH)	14	15	16	17	18	19	20
DATA COLLECTION/ PARAMETERS	4	5	6	7	8	9	10
JUSTIFICATION							
PROBLEM DEFINITION AND DESCRIPTION (CLARITY, DIAGRAMS)	4	5	6	7	8	9	10
LOGIC FLOW AND THE MODEL	9	10	11	12	13	14	15
V&V; OUTPUT ANALYSIS;	9	10	11	12	13	14	15
OPTIMIZATION							
GOOD PRESENTATION & DEMONSTRATION	24	25	26	27	28	29	30
				<u>TOTAL SCORE</u>			