

	PROGRESS REPORT GUIDELINES
ME 555 DESIGN OPTIMIZATION	PANOS Y. PAPALAMBROS WINTER 2004

The progress report is an expansion and adaptation of your project proposal. This report will be further expanded and updated to produce your final report.

For each subsystem or subproblem you have identified, you must include the following sections:

1. Problem Statement

An updated version of the material in the proposal.

2. Nomenclature

An updated version of the material in the proposal.

3. Mathematical Models

An updated version of the material in the proposal.

Specifically, you must now have a complete and validated (in terms of feasibility) optimization model statement.

4. Model Analysis

In this section you describe results from monotonicity analysis, as applicable.

Check for well boundedness, model transformations or simplifications you may decide to make. Use monotonicity tables, and activity matrices, where appropriate.

Check constraints for possible redundancy.

Identify active or conditionally active constraints, as appropriate.

5. Numerical Results

You must have coded your model and linked it with one or more of the optimization packages made available. Report initial results, possible local minima etc.

Pay special attention to how exactly you code your model for numerical processing. For example, avoid expressions that have divisions by quantities that can become zero.

Do not include printouts except for 1-2 pages of final results.

For the entire system/problem include a section that identifies possible design conflicts and tradeoffs among the subsystems/subproblems. Resolving these conflicts will be required to complete the project.