Lecture 2. 26 August 2004

- Review material of previous lecture.
- A general design optimization model \((p \leq n)\). Conversion to standard form - maximization, greater than type constraints.
- Different forms for the model; unconstrained problems, linear programming, quadratic programming, general nonlinear programming. Discrete variables.
- Feasible set (constraint set); active, inactive, violated constraints.
- Explicit functions vs. implicit functions; formulation of the problem having implicit functions of the variables; Chapter 14, Section 14.1.
- Individual projects: students to propose a substantial project suitable for their background; develop the project statement (Step 1 of the problem formulation process). Due 2 September 2004.
- Distribute the paper, "What is Optimization" from the Guide (Ref. 1).
- Read Sections. 2.11, 14.1.
- No lecture on 8/31/04; gone to Albany to attend a conference.
- Read paper, "What is Optimization", and Section 10.6 from the text.