Mathematical Programming I (OR&IE 630 – Fall '96)

- **Instructor**: Edoardo Amaldi, 237 Rhodes Hall, 4-4606, amaldi@cs.cornell.edu
- **Classes**: Tuesday/Thursday 11:40-12:55 pm, Phillips Hall 307
- **Recitations**: Wednesday 2:30-3:20 pm, Upson Hall 205
- **TA**: Alexander Below, 291 Rhodes Hall, 5-9139, below@orie.cornell.edu
- **Topics:**

  Linear Programming and some extensions

  - Fundamentals of linear algebra, convex analysis and polyhedral theory
  - Simplex and revised simplex methods
  - Duality, dual simplex method and sensitivity analysis
  - Selected network flow applications
  - Complexity of Linear Programming

- **References:**

  M.S. Bazaraa, J.J. Jarvis and H.D. Sherali, *Linear Programming and Network Flows*, John Wiley & Sons, New York (1990).

  V. Chvátal, *Linear Programming*, W. H. Freeman and Company, New York (1983).

  K. Murty, *Linear Programming*, John Wiley & Sons, New York (1983).

  A. Schrijver, *Theory of Linear and Integer Programming*, Wiley-Interscience series in discrete mathematics and optimization, John Wiley & Sons, New York (1986).