

COURSE ANNOUNCEMENT

SPRING 2010

APM 523

Optimization

Instructor: Dr. H. D. Mittelmann

Time: 1:30 – 2:45 Tuesday & Thursday

Location: PSA 311

Class #: 16193

Credit Hours: 3

Topics: The important area of optimization will be covered with a strong emphasis on practical algorithms. The course requires only fundamental undergraduate background in linear algebra and calculus. It is of interest to students in mathematics, statistics, the sciences, engineering and business. Students will do several computer projects.

The main topic is unconstrained and constrained nonlinear optimization, including interior point methods for linear programming. Students will learn both fundamental theoretical results as well as *state of the art algorithms* including *software*.

See the instructor's webpage: <http://plato.asu.edu/guide.html>

Prerequisites: MAT 342 or MAT 371 or 460; or MAT 520; or equivalent, **or approval of instructor.**

Textbook: D. G. Luenberger and Y. Ye, *Linear and Nonlinear Programming*, 3rd ed., Springer, 2008 This book is available for ASU at:
<http://www.springerlink.com.ezproxy1.lib.asu.edu/content/h26548/?p=5c4b359972e84cfaaa5dd81f3059f103&pi=0>