Texas A&M University  
Departmental Request for a New Course  
Undergraduate • Graduate • Professional  
• Submit original form and attach a course syllabus.*

1. This request is submitted by the Department of  
   Industrial and Systems Engineering:

2. Course prefix, number and complete title of course:  
   ISEN 620 Survey of Optimization

3. Course description (not to exceed 50 words):  
   Theory and numerical methods for deterministic linear and nonlinear optimization; topics  
   include linear programming, unconstrained-nonlinear optimization, constrained-nonlinear optimization, Lagrange and K-K-T conditions,  
   and numerical algorithms.

4. Prerequisite(s):  
   MATH 304 or MATH 311

5. Is this a variable credit course?  
   □ Yes  
   □ No  
   If yes, from ______ to ______

6. Is this a repeatable course?  
   □ Yes  
   □ No  
   If yes, this course may be taken ______ times.
   Will this course be repeated within the same semester?  
   □ Yes  
   □ No

7. Has this course been taught as a 489/689?  
   □ Yes  
   □ No  
   If yes, how many times?  
   2
   Indicate the number of students enrolled for each academic period it was taught.  
   79 (07C); 23 (09C)

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments.  
   Attach approval letters.

10. Prefix  
    Course #  
    Title (excluding punctuation)  
    ISEN 620 SURVEY OPTIMIZATION

    Lect.  
    Lab  
    SCH CIP and Fund Code:  
    03000031437010006162209-10003632

    Admin. Unit  
    Acad. Year  
    FICE Code  

    Approval recommended by:  
    Head of Department  
    Date: 5-5-08

    Chair, College Review Committee  
    Date: 5-5-08

    Dean of College  
    Date: 5-5-08

    Submitted to Coordinating Board by:  
    Associate Director, Curricular Services  
    Date

    Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201.  
Curricular Services – 11/07
DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING

ISEN 620 COURSE SYLLABUS

Number and Title of Course: ISEN 620 Survey of Optimization

Hours: Lecture 3, Lab 0, Credits 3

Prerequisites: MATH 304 or MATH 311

Course Description: Theory and numerical methods for deterministic linear and nonlinear optimization. Topics include linear programming, unconstrained-nonlinear optimization, constrained-nonlinear optimization, Lagrange and K-K-T conditions, and numerical algorithms.

Learning Outcomes: Students should be able to formulate and solve linear and non-linear programming problems.

Textbook(s): Instructor notes


Course Outline by Major Topics and Approximate Time Assigned to Each:

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Grade Basis: Homework 25%  Exams (3) 75%

Course Instructor: Guy L. Curry
Telephone number: 845-5576  Email address: g-curry@tamu.edu
Office hours: 8-9 AM, M-F  Office location: 237G Zachry Engineering Center

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Cain Hall, Room B118, or call 845-1637.

Academic Integrity: “Aggies do not lie, cheat, or steal, nor do they tolerate those who do.” It is the responsibility of students and instructors to help maintain scholastic integrity at the university by refusing to participate in or tolerate scholastic dishonesty. (http://www.tamu.edu/aggiehonor)