

# Integer Programming – Syllabus

MATH 7594, Section 001, Spring 2009

**Instructor:** Stephen C. Billups, CU-Denver Bldg., Rm 607, (303)556-4814  
email: Stephen.Billups@ucdenver.edu,  
URL: <http://math.ucdenver.edu/~billups>  
Course Website: <http://math.ucdenver.edu/~billups/courses/ma7594/>  
Office hours: MW 1:30-2:30, TR after class, or by appt. (Note: office hours may change—check my web site for updates).

**Class Hours:** TR 2:30-3:45, CU-Denver Bldg, Room 641

**Prerequisites:** Linear Programming (Math 5593) or permission of instructor

**Required Text:** Bertsimas, Weismantel, **Optimization over Integers**, Dynamic Ideas, 2005.

---

**Overview:** This Ph.D. level course is concerned with optimization problems involving integer variables. This class of problems is both extraordinarily useful (as measured by the range of important applications); extremely difficult to solve; and fascinating to study. This course will cover essential practical, theoretical, and algorithmic concepts of the field.

**Assignments and Grading:** Homework (40%), Midterm (15%), Presentation (15%), Project (30%).

## Course Policies:

- Late Policy: Unless otherwise stated, no late assignments will be accepted.
- Academic Honesty:
  - Plagiarism is the use of another person's words or ideas without crediting that person. While I encourage you to discuss homework problems with other students, you must write-up your solutions in your own words, and give credit for any help you received. Plagiarism and cheating will not be tolerated and may lead to failure on an assignment, in the class, and/or dismissal from the University.
  - You are responsible for being attentive to or observant of campus policies about academic honesty as stated in the University's Student Conduct Code:  
(<http://thunder1.cudenver.edu/studentlife/studentlife/discipline.html>)
- Access, Disability, Communication: UCD is committed to providing reasonable accommodation and access to programs and services to persons with disabilities. Students with disabilities who want academic accommodations must register with Disability Resources and Services (DRS), 177 Arts Building, 303-556-3450, TTY 303-556-4766, FAX 303-556-2074. I will be happy to provide approved accommodations, once you provide me with a copy of DRS's letter.
- Incompletes: Incomplete grades (IW or IF) are NOT granted for low academic performance. To be eligible for an incomplete grade, students must 1) Successfully complete a minimum of 75% of the course; 2) Have special circumstances beyond their control that preclude them from completing graded assignments; and 3) Make arrangements to complete missing assignments with me.
- Spring 2009 CLAS Academic Policies: Students are responsible for reading and complying with the CLAS Academic Policies (separate handout). This handout includes a list of Important Dates, which you should be aware of.