Course Information for Math 408 and 827

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Office Hours:	By appointment.
Text:	Integer Programming by Laurence Wolsey
Grading:	**408**: 20% Homework, 30% Midterm, 50% Final.
	827: 20% Homework, 20% Presentation, 20% Midterm, 40% Final.

Towards the end of the term, graduate students will each present a classic research paper in class. The paper will be chosen in conjunction with the instructor.

First Homework Assignment for Math 408 and 827

Due: Wednesday, January 31st, 2007, in class.

All references are to the Wolsey text.

Problems for Math 408 and 827:

1.-3. Chapter 1 problems 1, 4, 5.
Note that for problem 4, $B = \{0, 1\}$.

4. Chapter 1 problem 14 for $N = 8$.
5. Formulate the minimum spanning tree problem as an integer program.
6. Show that the integer program:

$$\max \quad x - \sqrt{2}y \qquad \text{such that } \{x \leq \sqrt{2}y, \quad x \geq 1, \quad x, y \text{ integer}\}$$

has feasible solutions arbitrarily close to zero, but no optimal solution.

Problems mainly for Math 827:

7. Chapter 1, problem 10.
8. Chapter 1, problem 14 for all N.

Reading:

Chapters 1 and 2.

Advertisement:

From January 21st to 23rd, SFU Surrey will host the *2nd International Conference on Algorithmic Operations Research (AlgOR 2007)*. Students in Math 408 and 837 may find it interesting.