

# Course Information for Math 408 and 708

**Instructor:** Tamon Stephen  
**Meeting Time:** MWF 11:30–12:20 in SUR 3170  
**Office:** 14-265 Central City Tower  
**Office Phone:** 778–782–7429  
**E-mail:** tamon@sfu.ca  
**Web page:** [http://www.math.sfu.ca/~tstephen/Teaching/1087\\_Math408/](http://www.math.sfu.ca/~tstephen/Teaching/1087_Math408/)  
**Office Hours:** By appointment.  
**Text:** Integer Programming by Laurence Wolsey  
**Grading:** **408:** 20% Homework, 30% Midterm, 50% Final.  
**708:** 20% Homework, 20% Presentation, 20% Midterm, 40% Final.

1. **Syllabus.** This course is an introduction to discrete optimization. The focus is on modelling problems as integer programs and polyhedral methods for solving these programs.
2. **Graduate student projects.** Near the end of the term, graduate students will each give a presentation on a research paper from the mathematical literature in class. The presentation should describe the results in the paper, as well as their context, and should be at a level where it will be understood by your fellow students. There may be an option to give these presentations at the SFU Operations Research Seminar series rather than in class. The papers will be chosen in conjunction with the instructor.
3. **Homework.** There will be five homework assignments during the term. Late homework will not be accepted.  
You are encouraged to talk with each other and the instructor about the homework, but you must write up the solutions yourself, using your own words.
4. **Exams.** Books, notes and calculators cannot be used on these tests. Students **must** plan to take the tests at their scheduled times.  
The tentative dates and times for the tests are:  
Midterm: Wednesday, October 22nd, 11:30–12:20 AM (in class)  
Final: Monday, December 8th, 3:30–6:30 PM
5. **Reserve Books.** There is a copy of the course text on reserve at the SFU Surrey library. Additionally, there are two textbooks that cover similar ground: Bertsimas and Weismantel's *Optimization Over Integers* and Lee's *A First Course in Combinatorial Optimization*.  
Schrijver's *Combinatorial Optimization* is an excellent reference book in this area. For a refresher on linear programming, Chvátal's book is available. The book of Papadimitriou and Steiglitz is good for background on computational complexity theory.

**Have a great term!**