Course title: Applicable Mathematics and Computing

Prerequisites: Math 20D and either Math 18 or Math 20F or Math 31AH. Students who have not completed listed prerequisites may enroll with consent of instructor.

Catalog Description: This course will give students experience in applying theory to real world applications such as Internet and wireless communication problems. The course will incorporate talks by experts from industry and students will be helped to carry out independent projects. Topics include graph visualization, labelling, and embeddings, random graphs and randomized algorithms. May be taken 3 times for credit.

Textbook: Game Theory by Thomas Ferguson.

Course Content: From the textbook, we will cover Part I (chapters 1-4 and time permitting chapter 5), Part II (chapters 1-5), Part III (chapters 1-4) and Part IV (chapters 1,3 and time permitting 2 and 4).

Grading: Students final score will be calculated as:
20% homework + 20% midterm1 + 20% midterm2 + 40% final.

Homework: Homework assignments are due weekly on Wednesdays at 4PM. The lowest homework score will automatically be dropped (i.e. not included in your average homework score). No late homework will be accepted.

Midterm Exams: There will be two midterm examinations, on Friday 21st of April and on Friday 19th of May. There will be no make-up exams. However, if you miss a midterm exam because of extraordinary circumstances, such as a serious illness or family emergency, and document the circumstances adequately, then you may substitute your final exam score for the missed exam. You must contact the instructor on or before the day of the examination. No notes are allowed.

Final Exam: The final exam is Monday 12th of June, 8AM-11AM. It is the students responsibility to ensure that they have no schedule conflicts with the final examination, and students should not enroll in the course if they cannot attend this exam at the scheduled time. A single page (8.5 x 11 inches, both sides) of handwritten notes is permitted.

Calculators: Calculators will not be needed for this course, and will not be allowed during examinations.

Regrades: If an error occurs in grading an examination or homework, this error must be reported to your Teaching Assistant during the same Discussion Section that it was returned. Once an examination leaves the room where it was returned, regrade requests for that examination will not be entertained. If a grading disagreement arises between student and Teaching Assistant, a student may ask the instructor to review the examination.

Students with Disabilities: If you require special assistance, please contact the instructor (rjitobin@ucsd.edu) at least a week in advance.