Math 375-01: Intro to Discrete Math Mon-Tue-Thu-Fri 2:00 – 2:50 pm Classroom: Armstrong Hall 316 My Office: Wissink 263 Professor: Dan Singer Webpage: http://mavdisk.mnsu.edu/singed/ Email: dan.singer@mnsu.edu My Office Hours: 11-12 and 3-5 MTHF

Course Description: An introduction to the concepts fundamental to the analysis of algorithms and their realization. Topics will include combinatorics, generating functions, recurrence relations, graph theory, and networks.

Prerequisite: Math 247 with a C or better or consent.

Textbook: Applied Combinatorics, 5th Edition, by Alan Tucker, 2007, Addison Wesley.

Course Format: My goal is to help you think through the material and participate actively in the class. I will give lectures and provide examples as needed, but I am relying on students to read the textbook carefully and work with me to understand and apply the ideas. Please read ahead, following the schedule on the second page of this syllabus. Questions from students about homework problems are encouraged at the beginning of class. I encourage you to see me in office hours if necessary.

Exam Policy: You may bring in a single sheet of notes to refer to during each exam. You may use a calculator as directed.

Homework Policy: Homework must be written up carefully and stapled. Please indicate at the top of your homework one or two problems you would like me to comment on, if necessary. All homework completed in good faith and turned in will receive full credit.

Attendance Policy: Please attend regularly. I would appreciate it if you would send me an email in advance of any unavoidable absences or emergencies.

Student Conduct: Please do the following: Arrive to class on time. Turn off your cell phone if you have one. Let me know in advance if you need to leave the classroom early for some reason. I will deduct class participation points for disruptive behavior and excessive absences.

Grades: Class participation: 50 points. Homework: 100 points. 3 Exams: 100 points each. Final Exam: 100 points. The final grade is determined by the scale below:

A: 495 – 550 points B: 440 – 494 points C: 385 – 439 points D: 330 – 384 points F: 0 – 329 points

Class Schedule:

<u>Date</u> Mon Jan 11 Tue Jan 12 Thu Jan 14 Fri Jan 15	Agenda section 1.1 section 1.2 section 1.2	<u>Date</u> Mon Mar 15 Tue Mar 16 Thu Mar 18 Fri Mar 19	Agenda section 5.3 Exam 2 section 5.4 section 5.4
Mon Jan 18	no classes	Mon Mar 22	section 5.5
Tue Jan 19	section 1.3	Tue Mar 23	section 6.1
Thu Jan 21	section 1.4	Thu Mar 25	section 6.2
Fri Jan 22	section 1.4	Fri Mar 26	section 6.2
Mon Jan 25	section 2.1	Mon Mar 29	section 6.3
Tue Jan 26	section 2.2	Tue Mar 30	section 6.4
Thu Jan 28	section 2.2	Thu Apr 1	section 6.5
Fri Jan 29	section 2.3	Fri Apr 2	section 7.5
Mon Feb 1	section 2.4	Mon Apr 5	section 7.1
Tue Feb 2	section 3.1	Tue Apr 6	section 7.1
Thu Feb 4	section 3.1	Thu Apr 8	section 7.2
Fri Feb 5	section 3.2	Fri Apr 9	section 7.3
Mon Feb 8	section 3.2	Mon Apr 12	section 7.4
Tue Feb 9	Exam 1	Tue Apr 13	Exam 3
Thu Feb 11	section 3.3	Thu Apr 15	section 7.5
Fri Feb 12	section 3.4	Fri Apr 16	section 8.1
Mon Feb 15	section 4.1	Mon Apr 19	section 8.2
Tue Feb 16	section 4.2	Tue Apr 20	section 8.2
Thu Feb 18	section 4.3	Thu Apr 22	section 8.3
Fri Feb 19	section 4.3	Fri Apr 23	section 8.3
Mon Feb 22	section 4.4	Mon Apr 26	section 9.1
Tue Feb 23	section 4.4	Tue Apr 27	section 9.2
Thu Feb 25	section 4.5	Thu Apr 29	section 9.3
Fri Feb 26	section 4.5	Fri Apr 30	section 9.4
Mon Mar 1 Tue Mar 2 Thu Mar 4 Fri Mar 5	section 5.1 section 5.1 section 5.2 section 5.2	Fri May 7	Final Exam 12:30-2:30 pm Chapters 7,8,9