Discrete Mathematics
Math 220, Spring 2017

Meeting Times and Location:
 Lecture: MWF 1:00-1:50pm
 Discussion: Th 2:30-3:20pm
 Classroom: SMUD 204

Professor: Yusra Naqvi
 Email: ynaqvi@amherst.edu
 Office: Seeley Mudd 201
 Office Phone: (413) 542-5712
 Office Hours: M 2:00-3:00pm, WF 9:00-9:50am, Th 1:30-2:20pm, and *by appointment*

Math 220 Fellow: Yari Diaz

Textbook: *A Discrete Transition to Advanced Mathematics* by Bettina Richmond and Thomas Richmond, published by the AMS, 2009. (ISBN: 978-0-8218-4789-3)

Course Webpage: http://ynaqvi.people.amherst.edu/math220sp17/

Course topics: This course is an introduction to discrete mathematics and involves the study of logic, elementary set theory, functions, relations and equivalence relations, mathematical induction, counting principles, and graph theory. Additional topics may be covered if time permits. This course serves as an introduction to abstract mathematics and pays particular attention to proof writing.

Homework: Homework will be assigned throughout the week and will include both readings and written solutions to problem sets. Refer to the course website for assignments and their due dates. Written homework must be handed in at the beginning of the class in which they are due, and late homework will not be accepted for grading. Submitted work should be neat, organized, and stapled, with your name appearing on every sheet. Where appropriate, please box or highlight your final answer.

While you are strongly encouraged to work on written problem sets in groups, all submitted assignments must consist only of your own work, *written in your own words*. If you work with other students or with a tutor, you should include a note at the top of your homework saying who you worked with.

You are required to read the relevant sections from the texbook that we cover each day. It is also important to look at homework problems for each class before the start of the next class in order to keep up with the class effectively. The best way to understand mathematics is to solve a lot of problems!

Absences: You are expected to attend every class and arrive on time for class. An absence due to emergency may be excused, provided that you can supply acceptable written evidence if required, and that you notify me *as soon as possible*. Two late arrivals will be treated as an absence. Students with more than four unexcused absences may have their grade lowered by one step (for example, a B- may be lowered to a C+).

Exams: There will be two in-class midterm exams and a three-hour cumulative final exam. All exams must be taken at the scheduled time. Make-up exams will only be allowed if you can supply *acceptable* written evidence, and that you notify me *before the end of the missed exam.* The midterm exams are tentatively scheduled as follows:

Midterm Exam 1:   Friday, February 24
Midterm Exam 2:   Wednesday, April 5

The final exam will be scheduled by the registrar at some point during the semester.

Grading: The overall grade will be based on the results of exams, the scores on homework, and on class participation, which will be measured in various ways, including attendence, participation in group work, in-class assignments and short quizzes. It will be determined using the following point distribution:

Homework	30%
Midterm Exams	20% each
Final Exam	30%

About the Statement of Intellectual Responsibilty: While you are strongly encouraged to work on homework problems in groups, the work you write up and hand in must be your own. If you receive help from an outside source, please include a note in your homework specifying what this was. For exams, you are not permitted to work with other students or use any additional aids such as calculators, notes, formula sheets, etc. If you are unsure about whether something is allowed or not, please speak with me, and I would be happy to clarify.

Failure to comply with the above guidelines on homework or a midterm will result in a 0 for the assignment. Cheating on the final exam will result in an F for the course. All incidences will be reported to your class dean.