

**CS 6003: FOUNDATIONS OF COMPUTER SCIENCE
FALL 2018
NYU, TANDON SCHOOL OF ENGINEERING
ONLINE CLASS
OFFICE HOURS: DOODLE WILL BE SENT OUT**

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1. COURSE SYLLABUS

1.1. **Catalog description:** This course covers logic, sets, functions, asymptotic notation, proof techniques, induction, number theory, recurrences, relations, graphs, trees, Boolean algebra and mathematical models of computation.

1.2. **Text:** Kenneth H. Rosen, Discrete Mathematics and its Applications, 7th Edition, The McGraw Hill Companies, 2012; ISBN: 9780073383095.

1.3. **Assignments and exams:** There will be regular (approximately weekly) homework assignments; it is a lot of work! One midterm exam, and one final exam; closed books and no notes. The midterm exam covers the material from the beginning of the course up to the exam. The final exam covers the entire course with an emphasis on the material covered since the midterm. Exam questions are based on material from the text, homework, and lectures. If you miss an exam without a good reason (documentation is required!), you get zero for it.

1.4. **Approximate grading scale:** Homework 20%, midterm 40%, and final 40%.

1.5. **Important dates:** Midterm: October 22–28, 2018
Final: December 17–21, 2018.

1.6. **Academic Dishonesty.** Absolutely no communication with other students is permitted on exams. I advise you that I will seek an F in the course for any cheating on an exam.

(See <http://engineering.nyu.edu/academics/codeofconduct/academicdishonesty>)

1.7. **Policy on Collaboration.** You may discuss the how to do the homework with other students, you must write up the solutions on your own. If you work with others, you must tell me who you collaborated with. If you work together, you must fully understand the work you submit. (See <http://cis.poly.edu/policies/>)

1.8. Tentative Topics.

- Logic, Sets, Functions.
- Algorithms
- Mathematical Induction
- Graphs
- Trees
- Boolean algebra.
- Modeling computation.
- Relations
- Number Theory

1.9. Withdrawal. You must formally withdraw from this course to avoid a failing grade by the last to withdraw date. This involves contacting the registrar to officially withdraw! If you need help with this you can also contact the Tandon online staff for assistance.

1.10. Grade Conversion.

- *Grade : Minimum*
- A: 90
- A-: 85
- B+: 80
- B : 77
- B- : 73
- C+ : 70
- C : 65
- F : Below 65