CMSC 250-Discrete Structures Honors, Spring 2019
Syllabus: CONTENT

1 Description

We will study fundamental mathematical concepts that are relevant to computer science. In particular we will cover proof techniques, induction, sets-functions-relations, propositional and predicate logic, combinatorics, probability, Number Theory.

2 Week by Week

All number-of-weeks are approx

1. Prop Logic and Circuits 1.5 weeks
2. Pred Logic and Quantifiers and Order Notation 1.5 weeks
3. Sets, functions, relations 0.5 week
4. Modular arithmetic and Crypto 1.5 weeks
5. Basic Proof Techniques, basic number theory, 2 weeks
6. Induction, 3 weeks
7. Combinatorics, Probability, Bayes Theorem 2 weeks (NOTE- this one may be less depending on what happens in recitation)
8. Pigeon Hole Principle. 1 weeks
9. Optional topics depending on time: Muffin Mathematics, Countable Sets.