CS 171 Discrete Structures II

Spring 2018 28 classes Tentative Schedule

 Mon Wed

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| Jan 15Syllabus, 4.1 Divisibility & modular arithmetic,4.3 extended Euclidean algorithm | Jan 174.4 Solving congruences,4.6 RSA encryption |
| Jan 224.6 RSA encryption | Jan 24Review Ch 13: Languages & Grammars, Finite State Machines, Language Recognition |
| Jan 29Language Recognition,Parsing & Push-Down Automata | Jan 31Parsing |
| Feb 513.5 Turing Machines & Turing's Thesis | Feb 7Turing Machines & the General Halting Problem |
| Feb 12Turing Machines and Computability, Church's ThesisReview | Feb 14Exam 1 |
| Feb 19Turing Machines and Complexity | Feb 21Status of the P = NP Problem, Godel's Incompleteness Theorem, Prolog & Predicate Logic |
| Feb 26Prolog & Predicate Logic | Feb 28Prolog & Predicate Logic,5.5 Proofs of Program Correctness |
| Mar 5Spring Breakno class | Mar 7Spring Breakno class |
| Mar 125.5 Proofs of Program Correctness | Mar 145.5 Proofs of Program Correctness |
| Mar 19Infinite Sets | Mar 21Infinite Sets |
| Mar 26Infinite Sets & Computable Functions,Review | Mar 28Exam 2 |
| Apr 2Easter Breakno class | Apr 4Travelling Salesperson Problem (TSP) |
| Apr 98.1 Recurrences,8.2 Linear Homogeneous Recurrence Relations | Apr 118.2 Linear Homogeneous Recurrence Relations |
| Apr 168.3 Linear Nonhomogeneous Recurrence Relations | Apr 188.3 Linear Nonhomogeneous Recurrence Relations |
| Apr 238.3 Recurrences for Divide-and-Conquer Algorithms | Apr 25Honors Convocation & Undergraduate Conferenceno class |
| Apr 308.4 Generating Functions and Recurrences | May 28.4 Generating Functions and Recurrences, Review |

Final Exam: Mon, May 7, 4:00 pm – 6:00 pm Last revised: 01/12/18