| Week | | Content | Reading | Written Assignments | Written Assignments Due Dates |
|---|---|---|---|---|---|
| week 1 | Tuesday, January 21, 2025 | Course policies, the Scheme Programming Language | Syllabus (on Canvas) Install & Familiarize Yourself with Scheme | Note: lab & WebAssign homework is not listed in this table | |
| | Thursday, January 23, 2025 | Propositional Logic, Truth Tables | Epp 2.1 | | |
| Week 2 | Tuesday, January 28, 2025 | Equivalences, Laws of Propositional Logic | Epp 2.1 | PS1 Out | |
| | Thursday, January 30, 2025 | Conditionals, DNFs, CNFs, Satisfiability | Epp 2.2 | | |
| Week 3 | Tuesday, February 4, 2025 | Laws of Inferece with Propositions | Epp 2.3 | PS2 Out | PS1 Due Mon, 2/3, 11:59pm |
| | Thursday, February 6, 2025 | First Order Logic: Predicates and Quantifiers | Epp 3.1 | | |
| Week 4 | Tuesday, February 11, 2025 | Free Variables, Negation of Quantified Statements Multiply Quantified Statements | Epp 3.2 - 3.3 | PS3 Out | PS2 Due Mon, 2/11, 11:59pm |
| | Thursday, February 13, 2025 | Laws of Inference with Quantifiers | Epp 3.4 | | |
| Week 5 | Tuesday, February 18, 2025 | Monday Schedule (No Class) | | | |
| | Thursday, February 20, 2025 | Sets, Cartesian Producs | Epp 1.2, 6.1 | | PS3 Due Fri, 2/21, 11:59pm |
| Week 6 | Tuesday, February 25, 2025 | Set Operations, Set Identities | Epp 6.2 | PS4 Out | |
| | Thursday, February 27, 2025 | Functions: Injective, Surjective, Bijective | Epp 7.1 - 7.2 | | |
| Week 7 | Tuesday, March 4, 2025 | Floor & Ceiling Functions, Countable Sets | Epp 4.6, 7.4 | PS5 Out | PS4 Due Mon, 3/3, 11:59pm |
| | Thursday, March 6, 2025 | Uncountuable Sets, Cantor's Hierarchy | Epp 7.4 | | |
| Week 8 | Tuesday, March 11, 2025 | REVIEW (if time permits) (Lecture: Countability Problems, Labs: Other Problems) | | | PS5 Due Mon, 3/10, 11:59pm |
| | Thursday, March 13, 2025 | MIDTERM EXAM | | | |
| Week 9 | Tuesday, March 18, 2025 | SPRING BREAK | | | |
| | Thursday, March 20, 2025 | | | | |
| Week 10 | Tuesday, March 25, 2025 | Relations: Basic Properties | Epp 1.3 (warm-up) 8.1 -- 8.3 | PS6 Out | |
| | Thursday, March 27, 2025 | Induction | Epp 5.2, 5.3 | | PS6 Due Mon, 3/31, 11:59pm |
| Week 11 | Tuesday, April 1, 2025 | Strong Induction | Epp 5.4 | PS7 Out | |
| | Thursday, April 3, 2025 | Peano + Review: Division Theorem, Prime Numbers Unique Factorization | Epp 4.4, 4.5, 4.8 | | |
| Week 12 | Tuesday, April 8, 2025 | Number Theory: Modular Arithmetic Fast Exponentiation | Epp 8.4 | PS8 Out | PS7 Due Mon, 4/7, 11:59pm |
| | Thursday, April 10, 2025 | GCDs, Bezout's Theorem Extended Euclid's Algorithm | Epp 8.4 | | |
| Week 13 | Tuesday, April 15, 2025 | Multiplicative Inverses, Fermat's and Euler's Theorems | Epp 8.4 | PS9 Out | PS8 Due Mon, 4/14, 11:59pm |
| | Thursday, April 17, 2025 | Public Key Cryptosystem: RSA | Epp 8.4 | | |
| Week 14 | Tuesday, April 22, 2025 | Graphs, Walks, Paths, Cycles | Epp 10.1 | PS10 Out | PS9 Due Mon, 4/21, 11:59pm |
| | Thursday, April 24, 2025 | Connectivity, Eulerian Circuits Hamiltonian Paths | Epp 10.1 | | |
| Week 15 | Tuesday, April 29, 2025 | Trees & Their Properties | Epp 10.4 | | PS10 Due Mon 4/28, 11:59pm |
| | Thursday, May 1, 2025 | Binary Trees, Tree Traversals | Epp 10.5 | Last class with binding material | Last Lab Due Fri, 05/02, 11:59pm |
| Week 16 | Tuesday, May 6, 2025 | REVIEW | | | |
| | Wednesday, May 7, 2025 3:00pm & 4:30pm Burchard 111 | FINAL EXAM | | | |