# COMP 330 Winter 2021: Lecture Schedule

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| Week 1 | Lecture 0 | 5 January | | |
| | Lecture 1 | 7 January | Introduction, basic maths | A1 out |
| Week 2 | Lecture 1 | 12 January | Deterministic finite automata | |
| | Lecture 2 | 14 January | Nondeterministic finite automata | |
| | **Quiz 1** | 15-16 January | Basic logic | |
| Week 3 | Lecture 1 | 19 January | Regular expressions | |
| | Lecture 2 | 21 January | Kleene's theorem | A1 due, A2 out |
| Week 4 | Lecture 1 | 26 January | The pumping lemma | |
| | Lecture 2 | 28 January | The pumping lemma | |
| | **Quiz 2** | 29-30 January | DFA, NFA, regular expressions | |
| Week 5 | Lecture 1 | 2 February | Minimization | |
| | Lecture 2 | 4 February | The Myhill-Nerode theorem | A2 due, A3 out |
| Week 6 | Lecture 1 | 9 February | Review | |
| | Lecture 2 | 11 February | **MIDTERM** | |
| Week 7 | Lecture 1 | 16 February | Context-free languages | |
| | Lecture 2 | 18 February | Designing context-free languages | A3 due, A4 out |
| Week 8 | Lecture 1 | 23 February | Pushdown automata | |
| | Lecture 2 | 25 February | Designing pushdown automata | |
| | **Quiz 3** | 26-27 February | Context-free languages | |
| Week 9 | Lecture 1 | 9 March | The pumping lemma for CFLs | |
| | Lecture 2 | 11 March | Introduction to computability | A4 due, A5 out |
| Week 10 | Lecture 1 | 16 March | Models of computation | |
| | Lecture 2 | 18 March | Basic computability | |
| | **Quiz 4** | 19-20 March | Context-free pumping lemma | |
| Week 11 | Lecture 1 | 23 March | Reductions | |
| | Lecture 2 | 25 March | Reductions | A5 due, A6 out |
| Week 12 | Lecture 1 | 30 March | Undecidable problems about CFG | |
| | Lecture 2 | 1 April | The Post correspondence problem | |
| Week 13 | Lecture 1 | 6 April | Undecidability of FOL | |
| | Lecture 2 | 8 April | The recursion theorem | A6 due |
| | **Quiz 5** | 9-10 April | Reductions | |
| Week 14 | Lecture 1 | 13 April | Review for the final | |