

CIS\*1910 Fall 2022, Professor Pascal Matsakis

This course is an introduction to discrete structures and formal methodologies used in computer science.

**Prerequisites:**

- There are no prerequisites or restrictions.

**Course Topics:**

- Boolean algebra (fundamental laws, duality principle, etc.)
- propositional logic (logical operations and equivalences, etc.)
- predicate logic (predicates, quantifiers, nested quantifiers, etc.)
- proof techniques (rules of inference, proofs by induction, etc.)
- set theory (set operations, power sets, Cartesian products, etc.)
- relations and functions (equivalence and order relations, bijections, etc.)
- other (numeral systems, equations and inequalities, etc.)

**Course Format:**

- Weekly lectures
- Weekly labs

**Methods of evaluation:**

- quizzes
- assignments
- midterm exam
- final exam