Logic and Proof

Course Instructor: Niels van Winden

December 15, 2024

Course Overview

Welcome to **Logic and Proof**! This course provides a foundation in the principles of mathematical logic and formal proofs. You will learn about propositional logic, predicate logic, proof techniques, and applications in mathematics and computer science.

Course Details

- **Course Code:** LOGIC101
- **Schedule:** Tuesdays, 10:00 PM - 12:00 PM
- **Location:** Room 203, Science Building
- **Credits:** 5
- **Prerequisites:** Precalculus

Instructor Information

- **Name:** Niels van Winden
- **Email:** jane.doe@example.com
- **Office:** Room 305, Science Building
- **Office Hours:** Tuesdays, 10:00 PM - 12:00 PM

Course Topics

This course covers the following key topics:

1. Propositional Logic
2. Boolean Algebra,
3. Logic Circuits
4. Predicate Logic
5. Proof Techniques (Direct, Contrapostive, Contradiction, Induction)
6. Recursion
7. Set Theory Basics
8. Functions, Relations and Infinity

Required Textbook

- **Title:** Delftse Foundations of Computation - 2nd Edition
- **Author:** Stefan Hugtenburg and Neil Yorke-Smith
- **Edition:** 2nd Edition
- **Publisher:** TUDelft

Important Links

- Syllabus and Schedule
- Additional Resources
- Discussion Forum

Contact and Support

For any questions or assistance, please email support@example.com.

Let's explore the beauty of logic and reasoning together!