

Course:

**CMPSC 3000 Formal Languages and Automata**

**3 hours**

Departments/Programs:

Physics, Astronomy, and Computer Science

An overview of formal models of computation and complexity classes. Topics include formal languages (finite automata, regular expressions, push-down automata, context-free grammars, and Turing machines), Church's thesis, computability, non-determinism, and NP-completeness. Same as MATH 3000 Formal Languages and Automata.

*Prerequisite(s): Grade of "C" or better in either CMPSC 1500 Program Design or MATH 2200 Introduction to Higher Mathematics and junior standing.*