# Chapter 1

## Final Exam Review

# Chapter 3

- Syntax
  - Regular Expressions
  - BNF
  - EBNF
  - Syntax Diagrams
  - Parse Tree
  - Abstract Syntax Tree
  - Derivations
  - Ambiguity

# Chapter 3

- Semantics
  - Attribute Grammars
  - Dynamic Semantics
  - Operational Semantics
  - Axiomatic Semantics
  - Denotational Semantics

# Chapter 4

- Lexical Analysis
  - State Transition Diagram
- Syntax Analysis
  - Parser
  - Top-down Parser
  - Bottom-up Parser

# Chapter 5

- Variables
  - Name
  - Address
  - Value
  - Type
  - Lifetime
  - Scope

# Chapter 6

- Type Information
- Data Types
  - Primitive Data Types
  - Composite Data Types
  - User-Defined Types
  - Structure Types

## Chapter 15

- Functional Programs
- Mathematical Functions
- Functional Forms
- Lambda Calculus
- Haskell

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## Chapter 16

- Predicate Calculus
- Clausal Form
- Horn Clauses
- Prolog

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## Final Exam

**Friday December 16, 2005**
**8:30 – 11:30**
**C 9000**

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