

CSIS 4244 Test 1 – Topics

Chapter 1 Overview

- Elements of programming languages
 - Syntax, semantics, pragmatics
- Language evaluation criteria
 - Readability, writeability, etc.
- Language categories
- Implementation methods
 - compilation, interpretation, hybrid

Chapter 2 Syntax and Grammars

- Terminology
- Using production rules to derive sentences
 - leftmost derivation
 - parse tree
- BNF, EBNF, Syntax graphs
- Ambiguous grammars
- Chomsky hierarchy
 - Regular grammars, FSA, regular expressions
 - Context-free grammars

- Syntax analysis
 - Scanning and Parsing

XML

- Regular expressions and EBNF in XML specs
- DTDs
- Well-formed and valid XML documents

Scripting Languages - Ruby

- Basic Ruby statements
- Strings, arrays, hashes
- Regular expressions & pattern matching
- Code blocks
- Tainted data