Instructor: Dr. C. Kim, DEH 253, 325-4281, ckim@ou.edu. Class Meetings: MWF 12:30PM { 1:20PM, CEC 441. Office Hours: MWF 11:30AM { 12:30PM.

Prerequisites: CS 2413 (Data Structures) and CS 2813 (Discrete Structures).


Course Content: The course covers fundamentals of abstract machine theory, formal language theory, and computability and complexity theory. Specific topics include Turing machines and their restrictions such as finite/pushdown automata, deterministic versus nondeterministic computations, Chomskian grammars such as regular/context-free grammars, and mathematical properties of these systems such as their relations, closure properties, and decision properties.

Student Activities:

Homework Assignments (30 %) Midterm Exam (30 %) Final Exam (40 %)

ABET Student Outcomes to be addressed

- A: An ability to apply knowledge of computing and mathematics appropriate to the discipline
- K: An ability to apply design and development principles in the construction of software systems of varying complexity.

Remarks:

1. Students are required to attend all class meetings.
2. Assignments must be submitted on the due dates in class.
3. Any student who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.
4. The College of Engineering utilizes student ratings as one of the bases for evaluating the teaching effectiveness of each of its faculty members. The results of these forms are important data used in the process of awarding tenure, making promotions, and giving salary increases. In addition, the faculty uses these forms to improve their own teaching effectiveness. The original request for the use of these forms came from students, and it is students who eventually benefit most from their use. Please take this task seriously and respond as honestly and precisely as possible, both to the machine-scored items and to the open-ended questions. Online evaluation of this course can be done at http://eval.ou.edu.