Instructor: Dr. C. Kim, DEH 253, 325-4281, ckim@ou.edu.
Class Meetings: MW 1:30PM – 2:45PM, CEC 117.
Office Hours: MW 3PM – 4PM.
Prerequisites: 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 %)

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. ABET outcome J to be measured for the course: An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modelling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.