

Computer Science 6400
Internet Algorithmics
Tennessee Technological University
Spring 2011
Mondays, Wednesdays, Fridays 9:05-10:00 a.m.

Instructor: Martha Kosa
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Office Hours: 1-4:30 TR, 3:30-4:30 MW
However, if you see the light on in my office at other times, please knock and I will try to help you. You can call or **email** (preferred) to make an appointment if you wish.

Course Objectives: To gain familiarity with the evolving area of Internet Algorithmics.

Textbooks: [Introduction to Information Retrieval](#), Manning, Raghavan, and Schütze, Cambridge University Press. 2008.
[Google's PageRank and Beyond: The Science of Search Engine Rankings](#), Langville and Meyer, Princeton University Press, 2006.
Other readings, available online, will be assigned as necessary.

Course Prerequisites: CSC 4200/5200 and CSC 4400/5400.

Course Requirements: Written homework assignments (25%), two tests, tentatively scheduled for March 4, 2011, and April 20, 2011 (15% each), in-class presentations of assigned readings (20%), a final project (25%). The final project can be a research paper or a programming project, subject to instructor approval.

Proposed Topics: Classical information retrieval (Boolean model, vector space model). Indexing, including compression. Web crawling. Web search. Google's PageRank algorithm for search engines. HITS method for ranking Web pages. Web caching.

Students with a disability requiring accommodations should contact the Office of Disability Services (ODS). An Accommodation Request (AR) should be completed as soon as possible, preferably by the end of the first week of the course. The ODS is located in the Roaden University Center, Room 112; phone 372-6119.