All satisfied with their seats? O.K. No talking, no smoking, no knitting, no newspaper reading, no sleeping, and for God’s sake take notes.

– Nabokov, *Lectures on Literature*

**Instructor**  Prof. Lillian Lee. Office hours: Wednesdays 10:30-12 in Upson 4152, or by appointment; for contact info and updates, see [http://www.cs.cornell.edu/home/llee](http://www.cs.cornell.edu/home/llee).

**Lecture time and place**  TR 2:55-4:10. While the first few lectures will be in Bard 140, we anticipate moving to Upson 315 (with advance notice, of course).

**Course homepage**  [http://www.cs.cornell.edu/courses/cs630/2006sp](http://www.cs.cornell.edu/courses/cs630/2006sp); (some) handouts, references, and resources will be posted.

**Prerequisites**  Elementary computer science background (e.g., what a graph is), elementary knowledge of probability (e.g., what conditional probability is), elementary knowledge of linear algebra (e.g., how to compute an inner product), mathematical maturity.

**Course work**  The approximate proportion of the course grade is indicated in brackets.

- Lecture guides [60%]. It is often said that the best way to learn something is to teach it. To that end, for each lecture and/or topic, one student or student group will be responsible for writing up, within a week, a hardcopy document consisting of: (a) roughly textbook-quality “scribe notes” (edited transcriptions) for the lecture(s); and (b) an original, non-trivial “finger-exercise” problem testing one or more basic concepts, together with a worked solution to that problem. For full credit, the guide should also include a “deeper” question and solution (partial solutions may be acceptable if the question is sufficiently “research-y”). Extra credit may be awarded for extra effort, such as including brief summaries of recent related results or posing additional interesting problems.

  The lecture guides will be posted and/or distributed to the class (with attribution) after any further revisions requested by the instructor are completed.

  More details will be forthcoming (for example, some are dependent on student enrollment), but the current intent is that each group will prepare a lecture guide roughly every two weeks.

- Exams: A midterm (in class, Thursday March 16) [15%] and final (7pm-9:30pm, Wednesday May 17) [15%]. These are intended to test basic knowledge of the course material. The worked problems given in the lecture guides should provide helpful preparation, and it is intended that the exam questions should be close in spirit to those problems (this is contingent on the quality of such problems.)

- Participation [10%]. Participation can occur outside of the regular class period (e.g., technical conversation in office hours or via email), but lecture attendance will figure into this component.

**Tentative syllabus**  Likely representative source material is indicated.


