**CIS 525 Software Development of Parallel and Distributed Systems Fall 2008**

**Lecture 22, November 18, 2008**

1. **Generalized Stochastic Petri nets (GSPN) vs. Markov chains:**
2. Definition of GSPN
3. Markov chain as reachability graph of GSPN
4. Example of system modeling with GSPNs
5. computing Markov chain from GSPNs.

**Lecture 23, November 20, 2008**

1. **Combining Object-Orientedness with Petri nets (pp. 146-157):**
2. CoOperative Objects – the structure; Object Control Structure - OBCS
3. Examples of COO objects - class File, class File Handler; dining philosophers
4. Petri nets inside objects – Petri nets represent internal concurrency of objects
5. Objects inside Petri nets – Petri nets serve as coordination tool of objects’ activities
6. Integration of Object-Orientedness and Petri nets – two levels of refinement
7. Dealing with issues of inheritance anomaly.