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

**Lecture 17: Tuesday, October 28, 2008**

1. **Reductions in Petri nets:**

a) six rules of reduction for P/T nets

b) example showing application of reduction rules.

1. **Characterization of the free-choice Nets:**
2. Characterization of state machines
3. Characterization of the marked graphs
4. Characterization of free-choice nets
5. Examples of nets in support of these classes of models.
6. **Homework #3 – distributed and discussed.**

**Lecture 18: Thursday, October 30, 2008**

1. **Hierarchical Colored Petri nets:**
2. Hierarchical substitution of transition – HS – notation and semantics
3. Other hierarchical operations on transitions
4. Place fusion
5. Example of an assembly line manufacturing system with several hierarchy constructs
6. Example of a phone system from user perspective with hierarchy constructs – single area and multi-area phone system; representation of special numbers