Readings

First Week
- Introduction
- Definitions
- Physical Modeling

Second and Third Week
- Bond Graphs
- Basic 1, 2 and 3 ports
- Sources
- Junction Structures
- Bond graphs for Control Systems
- Active Bonds, Block Diagrams
- Causality

Fourth and Fifth Week
- Mechanical Systems
- Electrical & Electromechanical Systems
- Hydraulic Systems

Sixth and Seventh Week
- Causality and State Equation Formulation
- Computer Simulation

Eight and Ninth Week
- Time Response Of Linear Systems
- Laplace Transforms
- Eigenvalues and Eigenvectors

Ninth and Tenth Week
- Linearization
- Proper Models
- Model Order Reduction
- Model Order Deduction

Eleventh and Twelfth Week
- Component Mode Synthesis
- Distributed Parameter Systems: Modal vs. discretized continuous systems
- Finding the Best Model: Emoda

Thirteenth and Fourteenth Week
- Advanced topics

* Introducing Systems and Control Takahashi, Rabins and Auslander, Addison-Wesley, 1972. Many, many other text books are available on this linear systems topic. Some examples are:

Final Exam as per UofM Final Exam Schedule.