## CS 4420: TECHNIQUES OF SIMULATION

Semester Hours: 3.0 Contact Hours: 3

Coordinator: Hassan Rajaei

Text: Simulation Using Promodel

Author(s): HARRELL, GHOSH, BOWDEN

*Year:* 2012

## SPECIFIC COURSE INFORMATION

Catalog Description:

Principles of simulation and application of simulation languages to both continuous and discrete systems. Prerequisites: MATH 2470 and CS 2020.

Course type: **ELECTIVE** 

## SPECIFIC COURSE GOALS

- I can identify application areas of computer simulation such as industry defense, finance, and education.
- I can explain the differences between the types of simulation such as Monte Carlo, VS. Discrete Event, and/or Real-time simulation.

## LIST OF TOPICS COVERED

- Introduction
- Simulation Basics
- Stages of Simulation Model Development
- Abstract Representation Techniques
- Random Number Distribution
- Evaluation of Simulation Modeling