

CS 11744: Simulation Techniques

Fall 2010

Instructor: Hicham G. Elmongui, Ph.D.

Required Textbooks:

- Discrete-Event System Simulation, Fifth Edition by Banks, Carson, Nelson & Nicol.

Course Syllabus:

- Introduction to Simulation
- Simulation Examples
- General Principles in Simulation
- Statistical Models in Simulation
- Queueing Models
- Random-Number Generation
- Random-Variate Generation
- Input Modeling
- Verification and Validation of Simulation Models
- Output Analysis for a Single Model
- Comparison and Evaluation of Alternative System Designs
- Simulation of Computer Systems
- Simulation of Computer Networks

Policies:

- The course follows the Academic Regulations for VT-MENA graduate students.

Grading:

- Biweekly homework and programming assignments 100%