

# ESI 4523: INDUSTRIAL SYSTEM SIMULATION

Spring 2012

Monday 10<sup>th</sup> Period, 5:10PM-6:00 PM

Wednesday 10<sup>th</sup> and 11<sup>th</sup> periods, 5:10PM-6:00 PM, 6:15PM-7:05PM

FAB 105

- DESCRIPTION:** This purpose of this course is to introduce you to the digital simulation techniques and industrial applications. The emphasis is on building computer-based models for real systems and performing simulation experiments to evaluate the behavior of a system under different sets of conditions. Students are required to do a term project, as detailed in a separate handout.
- TEXT:** Kelton, Sadowski and Sturrock, "Simulation Using ARENA," 5<sup>th</sup> Edition, McGraw-Hill
- REFERENCES:** Pegden, Shannon and Sadowski, "Introduction to Simulation Using SIMAN," Second Edition, McGraw Hill, 1995.  
Law and Kelton, "Simulation Modeling and Analysis," 3<sup>rd</sup> Edition, McGraw-Hill, 2000.
- INSTRUCTOR:** S. X. Bai, 478 Weil Hall, 2-1464 X2006, bai@ufl.edu  
Office Hours: 1PM -2PM, Monday & Wednesday.
- TA:** Vijay Pappu  
[psnvijay@ufl.edu](mailto:psnvijay@ufl.edu)  
Office Hours: Tuesday 9:30 AM to 10:30 AM.  
Thursday 9:30 AM to 10:30 AM.
- HOMEWORK:** We will have weekly problem sets. All homework is due on the date specified. Late homework will NOT be accepted.
- TESTS:** Test #1: Wednesday, February 22, Periods 10 & 11.  
Test #2: Wednesday, April 18, Periods 10 & 11.  
Project presentation: April 27<sup>th</sup>.  
NOTE: If for whatever reason you cannot take a test, please inform the instructor before the test. Otherwise, you will lose the opportunity for a make-up test.
- GRADING:** Homework 30%; Test #1 20%; Test #2 20%; Term project 30%.

PREREQUISITES: Computer Programming, Probability and Statistics.

**Attendance:** Students are expected to demonstrate professionalism. Attendance will be taken. Absences will be excused only if arrangements are made *prior* to the absence. Students who have more than three unexcused absences will have their final course grade reduced by one letter grade for each integer multiple of four absences.

**Course Website:** <https://lss.at.ufl.edu/>

On the website you can find all the announcements, course materials including the PowerPoint presentations, homework assignments, grades and the syllabus. Please check the website frequently.

### **Honor Code**

Kindly note and adhere to the following policy: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

NOTE: A C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit:

<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>