Psy 600, Statistical Inference

Fall Semester 2010

Bldg Psyc, Rm. 3102, TTh 10:30-11:45AM

Instructor: Prof. Zygmunt Pizlo, PRCE 194

                  Office Hour: Th 1-2PM

Teaching Assistant: Yun Shi, shi28@purdue.edu

                  Office: PRCE 192

Course objectives:

The focus will be on applying regression models to psychological data. Emphasis will be put on formal definitions of the models, assumptions underlying the models and implications of violating these assumptions. There will be several computer assignments that will give the students opportunity to apply this knowledge to data.

 The total weight of all homeworks is 1/3.

There will be two exams: midterm and final. The two exams will have equal weight. The final grade will be based on the exams and homework.

Topics:

1. Selected topics in probability theory, set theory, logic and matrix algebra.
2. Review of undergraduate statistics.
3. Simple linear regression.
4. Multiple linear regression.
5. Nonlinear regression.

Textbook:

Kutner, M.H., Nachtsheim, C.J., Neter, J. & Li, W. (2005) Applied Linear Statistical Models. McGraw-Hill/Irwin, Edition 5.