APM 696 (730). Advanced Regression Modeling Methods

Instructor : Lianjun Zhang  
Office : Room 323 Bray Hall  
Phone : (315) 470-6558  
E-Mail : lizhang@esf.edu  
Lecture : Tue. Thur. 2:00-3:20 pm, Bray Room 315  
Office Hours : Tue. Thur. 12:00 - 1:00 pm or by appointment  
Pre-requisite : APM 630 or equivalent  
Lecture Notes: available for purchase at the ESF Copy Center, Room 04, Bray Hall.  

Course Objectives:

APM 730 is designed for advanced graduate students in different study fields who need to conduct more complicated regression analysis and modeling, such as generalized linear and nonlinear models, variogram and kriging, linear mixed models for spatial data, spatial regression models (spatial lag and spatial error models), local spatial statistics and models, and LOESS and GAM. The course focuses on statistical concepts and theory, modeling strategies, and statistical computation using SAS. Example programs will be given for each procedure discussed in the course and the resultant computer output will be interpreted in detail.

Course Outline:

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<td>Poisson Regression</td>
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<td>Spatial Regression Models</td>
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<td>Local Spatial Statistics and Models</td>
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<td>Spline, LOESS and GAM</td>
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Reference:


Evaluation:

Your progress will be evaluated by the following weights:

Homework / Assignment 100%

Note:

(1) No quiz, test or exam!
(2) You will have a homework or reading assignments for each chapter. Homeworks will usually require statistical analysis and interpretation of the results. You may work with other students on statistical computing and discussion of potential solutions. You will be expected to submit your own report for the analysis results. Copying the report from each other is NOT acceptable.

Grading System:

Your final grade will be determined as follows:

95 - 99 = A
90 - 94 = A-
85 - 89 = B+
80 - 84 = B
75 - 79 = B-
< 75 = F

Good Luck!