Semester course: STAT 7630 -- 3 CREDIT HOURS (Quarter course 763)

1. Transcript Abbrevation: (maximum 18 characters)

    Nonpar Func Estim

2. Long course title

    Nonparametric Function Estimation

3. Course description: (maximum of 250 characters)

    Function estimation with emphasis on smoothing splines, flexible model building with multivariate data, reproducing kernel Hilbert space methods, additional topics in smoothing

4. Prerequisites / Co-requisites (use quarter and semester codes):

    Stat 6802 (Stat 622) and Stat 6950 (Stat 645) and knowledge of linear algebra, or permission of instructor.

5. Exclusions (use quarter and semester codes):

    Stat 763

6. A list of topics that make up the course: (One per line, max of 15 topics -- if you course description is a list of topics, I can just use that list)

    Smoothing splines
    Smoothing parameter selection
    Bias-variance trade-off
    Spline ANOVA models
    Reproducing kernel Hilbert space
    Kernel methods

7. Does your class have a component that is not just a lecture (YES/NO):

    No

8. If your course is not a straight conversion and adds or removes material, write a brief rationale for the change (one sentence -- max 250 characters).

    NA