

OHIO STATE NEW COURSE REQUEST

College: Mathamatical and Physical Sciences

Academic unit: STATISTICS

Book 3 Listing:

(e.g., Portuguese)

Proposed

Course No: 760

Full Title of Course: Elements of Statistical Learning

Proposed Effective Qtr/Yr: SU AU WI SP YEAR: 2006 (See *OAA Manual* for Deadlines)

A. Course Offerings Bulletin Information. Follow instructions in the *OAA Academic Organization and Curriculum Manual*.

Is this a course with decimal subdivisions? If so, use one New Course Request form for the generic information that will apply to all subdivisions. Use separate forms for each new decimal subdivision, including on each form only the information that is unique to that subdivision.

18-Character Transcript Abbreviation:

Level U G P

Credit Hours:

3

Description (*not to exceed 25 words*): Statistical and Machine Learning - Applied modern regression, pattern recognition

and clustering techniques for discovery/understanding of underlying statistical structures within large, complex and noisy data sets

Quarter offered (*check*): SU AU WI SP *Distribution of class time/contact hours: $\frac{2 \text{ 1.5-hr cl}}{\square}$

Quarter and contact/class time hours information should be omitted from Book 3 publication: (check here)

Prerequisite (s): STAT 610/623 or higher, or EE 804/806; Familiarity with Matrix Algebra and Linear Regression Analysis

Exclusion or limiting clause: N.A.

Repeatable to a maximum of 0 credit hours.

Cross-listed with: N.A.

Grade Option (Please check): Letter S/U Progress

If this course is Progress graded, what course is the last one in the series? N.A.

Honors Statement: Yes No
Off-Campus: Yes No

GEC: Yes No
EM: Yes No

Admission Condition
Course: Yes No

Other General Course Information: Final project report and class presentation is a key component of this course
(e.g. "Taught in English." "Credit does not count toward BSBA degree.")

Subject Code 27.0501

Subsidy Level (V, G, T, B, M, D, or P) D

(For explanation see the following web sites:

www.ureg.ohio-state.edu/ourweb/srs/cip or www.regents.state.oh.us/hei/ci/STAGE_1/sld001.htm

If you still have questions please email Jed Dickhaut at: Jdickhaut@exchange.ureg.ohio-state.edu)

B. General Information:

1. Provide the rationale for proposing this course: See attached sheets

2. List Major/Minor affected by the creation of this new course. Attach revisions of all affected programs.
This course is (check one) Required Elective Other (Explain) : See attached sheets

* If the course offered is less than quarter, term, or semester, please also complete the Flexibly Scheduled/Off Campus/Workshop Request form.

3. Indicate the nature of the program adjustments, new funding, and/or withdrawals that make possible the implementation of this new course.

See attached sheets

4. Is the approval of this request contingent upon the approval of other course requests or curricular requests?

Yes No List:

5. If this course is part of a sequence, list the number of the other course(s) in the sequence: N.A.

6. Expected section size: ¹⁵ Proposed number of sections per year: One

7. Do you want prerequisites enforced electronically? (See OAA Curriculum Manual for what can be enforced.) Yes

8. This course has been discussed with and has the concurrence of the following academic units needing this course or with academic units having directly related interests (*List units and attach letters and/or forms*): Not Applicable

See attached sheets

9. Attach a course syllabus that includes a topical outline of the course, student learning outcomes and/or course objectives, off-campus field experience, methods of evaluation, and other items as stated in the *OAA Curriculum Manual*.

APPROVAL SIGNATURES (As needed. All signatures on lines in ALL CAPS (e.g. ACADEMIC UNIT) must be completed

	N.A.		
Academic Unit Undergraduate Studies Committee Chair (Undergraduate course)	Printed Name		Date
<i>Elizabeth A. Stasny</i>	Elizabeth A. Stasny		8-18-05
Academic Unit Graduate Studies Committee Chair (Undergraduate/Graduate course)	Printed Name		Date
School /College Undergrad Curriculum Committee (Undergraduate/Graduate course)	Printed Name		Date
School /College Graduate Curriculum Committee (Undergraduate/Graduate course)	Printed Name		Date
<i>Douglas A. Wolfe</i>	Douglas A. Wolfe		8/18/05
ACADEMIC UNIT CHAIR /SCHOOL DIRECTOR	Printed Name		Date
COLLEGE DEAN	Printed Name		Date
Graduate School (If Appropriate)	Printed Name		Date
ASC Curriculum Committee Chair (If Appropriate))	Printed Name		Date
University Honors Center (If Appropriate)	Printed Name		Date
Office of International Education (study tour only)	Printed Name		Date
ACADEMIC AFFAIRS	Printed Name		Date