

Proposing new interdisciplinary specializations

A graduate interdisciplinary specialization involves two or more graduate programs at least one of which must be outside of the student's major graduate program. In instances where the student's major graduate program is included in the specialization and the specialization consists of coursework in only two programs, the specialization will be termed a Graduate Interdisciplinary Minor.

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FAQs

1. Graduate Studies Committees (GSCs) in conjunction with graduate faculty of the graduate programs involved develop and transmit the proposal for an interdisciplinary specialization.
2. The proposal should contain the following elements:
 - o Title of the proposed interdisciplinary specialization, rationale for its development, and a brief description of its purpose, including anticipated benefits for participants.
 - o Description of the proposed curriculum for completion of the interdisciplinary specialization, including a master list of required and/or elective courses. At least 14 but not more than 23 hours of graduate-level coursework are required. These hours must include at least four different courses. At least 14 hours must be from outside the home graduate program but may include cross-listed courses. Cross-listed courses that comprise this 14-hour minimum must be enrolled in outside the home department.
 - o Administrative arrangements and support for the proposed interdisciplinary specialization.
 - o Plans to enroll students and prospective enrollment.
 - o Letter(s) of support from the participating deans
3. GSCs seek approval of the proposal through whatever procedures the graduate programs/departments/schools/colleges deem necessary.
4. GSCs submit the approved proposal and a letter of transmittal to the Graduate School for review and action. The letter should be signed by all the involved GSC Chairs.
5. The Curriculum Committee of the Council on Research and Graduate Studies reviews the proposal and makes a recommendation for action to the Council.
6. The Council on Research and Graduate Studies acts on the proposal. If approved, the Graduate School notifies the Office on Academic Affairs (OAA) of the approval subject to further review by the Council on Academic Affairs (CAA). Upon completion of the review process, OAA will inform the University Registrar of the approved graduate interdisciplinary specialization so that the new designation will appear on the student's transcript.

Search:

OSU Graduate School
 Ohio State University

Events & Deadlines

Graduate School Calendar

Workshops and Other Events

Graduation Deadlines(PDF)

Dear Jessica

Here is the copy our ~~our~~ proposed GIS.
We need approval from the Curriculum Committee of the College, I believe, and a letter of support from the Dean.

Many thanks for your help

Angela Dean

ANGELA DEAN 292-0292
dean.a@osu.edu



Department of Statistics

404 Cockins Hall
1958 Neil Avenue
Columbus, OH 43210-1247

Phone 614-292-2866
Fax 614-292-2096

March 2, 2006

Elliot E. Slotnick
Associate Dean, Graduate School
250 and 247 University Hall
230 N. Oval Mall
Columbus, OH 43210-1366

Dear Dean Slotnick:

re: Proposed GIS in "Quantitative Methods in Consumer Behavior"

The proposed GIS has been approved by the Curriculum Committee of the Department of Statistics. The proposed curriculum and administrative arrangements are acceptable to the Department and we will lend support to those of our students who desire to obtain this Specialization as part of their studies in Statistics.

I am pleased to support the proposal on behalf of the Graduate Studies Committee of the Department of Statistics.

Sincerely

Elizabeth Stasny
Graduate Studies Chair
Department of Statistics



Department of Psychology

238 Townshend Hall
1885 Neil Avenue Mall
Columbus, OH 43210

October 31, 2005

Curriculum Committee
Council on Research and Graduate Studies

Dear Colleagues

The proposed GIS in Quantitative Methods in Consumer Behavior has been reviewed by the Graduate Studies Committee of the Department of Psychology.

The proposed curriculum and administrative arrangements are acceptable to the Department and we will lend support to those of our students who desire to obtain this Specialization as part of their studies in Psychology.

I am pleased to support the proposal on behalf of the Graduate Studies Committee of the Department of Psychology.

A handwritten signature in cursive script that reads "Marilynn B. Brewer".

Marilynn B. Brewer, Chair
Graduate Studies Committee
(614) 292-9640
Brewer.64@osu.edu



DEPARTMENT OF FINANCE

Dean Susan L. Huntington
Graduate School
The Ohio State University
250 University Hall
230 North Oval Mall
Columbus, OH 43210-1366

December 30, 2004

Dear Dean Huntington,

I am delighted to support the attached proposal for a Graduate Interdisciplinary Specialization (GIS) in "Quantitative Methods in Consumer Behavior." This is a program designed for students already enrolled in the PhD programs in Marketing, Psychology, and Statistics. The program was approved by the Graduate Education Curriculum Committee on December 17, 2004 (see attached memo). We now seek approval from the Graduate School for this new and exciting GIS.

The seven faculty members that are behind the proposal (Dean, Allenby, Van Zandt, MacEachern, Otter, Peruggia, and Browne) are working together on a large-scale research project, and have generated a significant NSF grant for The Ohio State University. They have also successfully launched an interdisciplinary colloquium series, which has generated considerable interest from graduate students in all three departments.

The proposed "Quantitative Methods in Consumer Behavior" program would enable students interested in interdisciplinary research in these three departments to better communicate the nature of their degree. The formalization of the program would also emphasize the great value added that the students obtain by being exposed to interdisciplinary approaches as well as methodologies outside their own fields of specialization.

From the attached proposal, it is clear that the group of faculty members has given considerable thought to the design of the program. Students would initially be recruited from within the existing three programs, and hence no additional resources are requested for the program's implementation. We believe that this new program will serve as a draw in attracting the most qualified students to the Marketing, Psychology, and Statistics programs.

The proposed program is exactly the type of interdisciplinary graduate program that the Graduate School is trying to encourage through its \$300,000 two-year incentive program to expand the current corpus of minors and interdisciplinary specializations available to graduate and professional students (RFP Autumn 2004). Hence, I would like this GIS program to be considered for one of the awards of up to \$15,000 for program development. [Once the appropriate forms are available on the Graduate School's website, we will submit the additional information that might be required to be considered for an award.]

I would also like to nominate the interdisciplinary colloquium series to be considered for an award out of the \$200,000 set aside for the development of interdisciplinary seminar series.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Ingrid Werner".

Prof. Ingrid M. Werner

PhD Program Director, Business Administration (GSCC)

FISHER
COLLEGE OF BUSINESS
THE OHIO STATE UNIVERSITY

SENIOR ASSOCIATE DEAN
ACADEMIC PROGRAMS

December 22, 2004


Dean Susan L. Huntington
Graduate School
The Ohio State University
250 University Hall
CAMPUS

Dear Susan:

Representing Dean Alutto in this matter, I am happy to signal the support of the Fisher College for the "Quantitative Methods in Consumer Behavior" Graduate Interdisciplinary Specialization (GIS) proposal. This proposal was recently approved by Fisher's Graduate Education in Business Administration Committee, chaired by Professor Ingrid Werner. You should receive a separate letter of support from her.

We are pleased to see faculty in Marketing, Psychology, and Statistics working together in this context and believe that interested Ph.D. students in the three curricular areas will be strengthened by the collaboration.

Sincerely,



Stephen Mangum

Senior Associate Dean for Academic Programs

Allenby
Alutto
Werner

**PROPOSAL FOR
Graduate Interdisciplinary Specialization (GIS) in
“Quantitative Methods in Consumer Behavior”**

Proposing Programs

Statistics

Contact: Angela Dean
Statistics Department
323 Cockins Hall
1958 Neil Avenue
Tel: 292-0292
FAX: 292-2096
email: dean.9@osu.edu

Marketing

Contact: Greg Allenby
Marketing Department
College of Business
540 Fisher Hall
2100 Neil Avenue
Tel: 292-9452
FAX:292-0879
email: allenby@cob.osu.edu

Psychology

Contact: Trisha Van Zandt
Psychology Department
230 Lazenby Hall
1827 Neil Avenue
Tel: 614-688-4081
FAX: 614-292-5601
email: van-zandt.2@osu.edu

Proposed GIS in “Quantitative Methods in Consumer Behavior”

Description

Human behavior reflects a complex, multi-staged process that begins with an individual allocating resources to affect his or her environment and to improve his or her state of being. The proposed GIS concerns the study of human behavior in the marketplace in making decisions and choices about available products. This study has wider implications to everyday life. For example, activities such as walking the dog, preparing meals, bringing the car to the repair shop, choosing a graduate school, are all done to adjust one’s relationship with the environment and all require choices and decisions.

The understanding and modeling of consumer behavior requires the researcher to (i) be adept at using statistical methods, especially hierarchical Bayesian modeling with known finite sample properties, (ii) have an appreciation of consumer behavior as seen in the marketplace and in the context of everyday life, (iii) have an understanding of underlying psychological processes that prompt consumers to allocate their cognitive resources and make decisions.

Graduate students who are interested in consumer behavior, either as a major component of their training or as a complement to their major area, tend to come from one of three departments: Marketing, Statistics or Psychology. Currently, graduate students tend to be trained wholly within their home department, but may have requirements from advisors to take courses in one or both of the other two departments. For example:

- graduate students in Marketing are required by some advisors to take a number of Statistics courses and a few gain a Master of Applied Statistics (MAS) degree.
- graduate students majoring in Psychology may also obtain a Master of Applied Statistics (MAS), and may or may not take Marketing courses;
- graduate students from the Statistics Department have no formal requirements for courses outside the department, but a number do take Psychology or Marketing courses as electives, and one student is currently taking the MBA courses.

There is a growing interest from students in formalizing their studies in Quantitative Methods in Consumer Behavior. This is evidenced by student voluntary attendance at two interdisciplinary colloquium series. In each of the quarters Spring, Autumn, 2004, and Winter, Spring, Autumn, 2005, seven faculty from the three departments, Statistics, Marketing, Psychology, have been running a series of interdisciplinary colloquia designed to stimulate joint research and to attract graduate students to this area. Each individual colloquium has been attended by 12–20 students. Eight Ph.D. students are currently pursuing research topics related to the subject of the proposed GIS. Some of these stu-

dents are supported by a grant awarded by the National Science Foundation to the seven faculty members in October 2004 to support research and students in this area. Currently there is no mechanism whereby these students can obtain formal recognition of the interdisciplinary nature of their research.

The purpose of the proposed GIS in “Quantitative Methods in Consumer Behavior” is to formalize a thriving ad hoc program, to ensure that the training of these students is broad based through required courses in statistics, marketing and psychology, and to increase the range of employment opportunities open to students with interests in this area by means of a university accredited program.

TARGETED STUDENT POPULATION

The Statistics Department brings in many highly qualified PhD students who have excellent backgrounds in Business, Economics and/or Psychology. A number of these students are extremely interested in interdisciplinary studies. PhD students in Marketing and Quantitative Psychology tend to have sufficient quantitative backgrounds to be able to take a number of Statistics PhD courses. Thus there is already a pool of talented students who form a natural recruiting base for the proposed GIS.

The GIS will be advertised in the promotional material of the three departments and on their respective websites. In addition, it will be advertised directly to students and faculty within Marketing, Psychology and Statistics through emails concerning the interdisciplinary colloquia. It will be advertised to graduate students from outside these departments through Statistics and Psychology methods courses, such as Stat 520, 521, 528, 529, 530 and Psy 608, 609, 617, 708, 831.

In the first two years of the program, we anticipate an enrollment of 5–8 students with a gradual increase over the years up to about 10–12 students.

PROPOSED CURRICULUM

From the GIS approved courses outside their home department, students must take four core courses and additional electives totaling 21-23 hours. Students must obtain at a least a grade of B in all GIS courses. For students from within the three sponsoring departments, the proposed core courses from their home department form part of their home degree requirement and do not add extra hours. Students from outside the three sponsoring departments will need to take all six core courses or substitute up to two alternative equivalent courses; in the latter case, at least one course must be taken from each of the sponsoring departments. In addition, students are expected to attend the interdisciplinary

colloquium series during at least one term. Students may sign up for one hour credit of 893 per term with the permission of the GIS co-ordinator and up to 3 hours may be applied towards the elective requirement.

Core:

Course descriptions are given at the end of the document.

Statistics 610, 623 (10 hours) OR Statistics 621, 622 (8 hours) Statistical Theory

Bus M&L 951 (5 hours) PhD Seminar on Marketing Models

Bus M&L 952 (4 hours) Consumer Behavior

Psy 508 OR Psy 708 (5 hours) Psychology of Judgement and Decision Making

Psy 608 (3 hours) Introduction to Mathematical Psychology

Electives (selection to be approved by the GIS co-ordinator)

Stat 641 (5 hours) Design and analysis of experiments

Stat 651 (4 hours) Survey sampling methods

Stat 656 (5 hours) Multivariate analysis (pre-req 645)

Stat 742 (3 hours) Analysis of Variance (pre-req lin alg)

Stat 746 (3 hours) Design and analysis of experiments (pre-req 742)

Stat 820 (3 hours) Statistical Inference (pre-req 622)

Stat 825 (3 hours) Advanced Bayesian Analysis

Bus M&L 954 (5 hours) Recent advancements in Marketing Research

Bus M&L 955 (4 hours) PhD Seminar on Consumer Behavior

Psy 609 (4 hours) Introduction to Mathematical Models in Experimental Psychology

Psy 617 (4 hours) Neural Network Models in Psychology

Psy 820 (4 hours) Fundamentals of Factor Analysis

Psy 830 (4 hours) Covariance Structure Models

Psy 831 (5 hours) Graduate Seminar in Judgement and Decision Making

ADMINISTRATIVE ARRANGEMENTS AND SUPPORT

The Graduate Studies Chairs of the three sponsoring departments, Statistics, Marketing and Psychology, have all indicated support for the GIS (see accompanying letters). The three departments already have recruiting procedures in place for graduate student entry. Students in the proposed GIS will be admitted to one of these departments in the usual way and can apply for admittance to the GIS in "Quantitative Methods in Consumer Behavior" in their second or third year of study. Students from outside the three sponsoring departments will be admitted to the GIS if their background skills are sufficient to allow them to take the core courses successfully.

The GIS oversight committee will be composed initially of the seven research faculty Dean, MacEachern, Peruggia from Statistics, Allenby and Otter from Marketing, Browne and Van Zandt from Psychology. The program will be administered by the three departments on the following rotation:

Current administer	Outgoing administer
Statistics (Dean)	(as needed)
Marketing (Allenby)	Dean
Psychology (Van Zandt)	Allenby
Statistics (MacEachern)	Van Zandt
Marketing (Otter)	MacEachern
Statistics (Peruggia)	Otter
Psychology (Browne)	Peruggia
Statistics (TBA)	Browne

The GIS Program Form and details concerning enrollment and the interdisciplinary colloquia will be obtainable from the website:

http://www.stat.ohio-state.edu/~amd/consumer_behavior.html

APPENDIX

COURSE DESCRIPTIONS

Core:

Statistics 610, 623 (10 hours)

Introduction to probability, random variables, and distribution theory intended primarily for students in MAS degree program.

Estimation, hypothesis tests, best tests, likelihood ratio tests, confidence sets, sufficiency, efficient estimators; intended primarily for students in the MAS degree program.

Statistics 621, 622 (8 hours) Statistical Theory

Sufficiency, maximum likelihood estimation, minimum variance unbiased estimation, Bayes estimation, decision theory.

Likelihood ratio tests, Neyman Pearson theorem and uniformly most powerful tests, confidence intervals, applications to linear models. (Pre-requisite Stat 620)

Bus M&L 951 (5 hours) Marketing Models

A study of recent model-based research in the marketing literature; emphasis on the strengths and weaknesses of various modeling approaches in specific problem areas and evaluation of model-based research.

Bus M&L 952 (4 hours) Consumer Behavior

Study of the academic literature on consumer behavior with emphasis on the theoretical and empirical contributions of consumer research.

Psy 508 (5 hours) Psychology of Judgment and Decision Making

An overview of current models and empirical research on cognitive processes in human decision-making and judgment under risk or uncertainty.

Psy 608 (3 hours) Introduction to Mathematical Psychology

Survey of current topics in mathematical psychology; topics include measurement theory, scaling, utility theory, subjective probability, decision making in uncertain situations, choice theory.

Psy 708 (5 hours) Psychology of Judgment and Decision Making

Introductory graduate course in the psychology of judgment and decision making including applications to health, law, economics, environmental issues, and social, cognitive, and clinical psychology.

Electives

Stat 641 (5 hours) Design and analysis of experiments

The linear model for experimental designs; analysis of variance; factorial experiments; and block designs.

Stat 651 (4 hours) Survey sampling methods

Sampling from finite populations, simple random, stratified, systematic, and cluster sampling designs, ratio and regression estimates; non-sampling errors.

Stat 656 (5 hours) Multivariate analysis (pre-req 645)

Matrix computation of summary statistics, geometry of sample data; multivariate normal distribution; MANOVA; principal components; discriminant analysis; topics may include factor analysis, cluster analysis, canonical correlation.

Stat 742 (3 hours) Analysis of Variance (pre-req lin alg)

Theory of the general linear model; least square estimates and properties, especially in non-full rank models; analysis of variance technique; factorial designs.

Stat 746 (3 hours) Design and analysis of experiments (pre-req 742)

A continuation of 742; various experimental designs; analysis of covariance, mixed and random models.

Stat 820 (3 hours) Statistical Inference (pre-req 622)

Statistical decision theory, foundations of statistics, Bayesian analysis, sequential analysis, sequential probability ratio test.

Stat 825 (3 hours) Advanced Bayesian Analysis

Bayesian computation, nonparametric Bayes methods, semiparametric Bayes methods, robust Bayesian analysis, complex Bayesian models.

Bus M&L 952 (5 hours) Consumer Behavior

Study of the academic literature on consumer behavior with emphasis on the theoretical and empirical contributions of consumer research.

Bus M&L 954 (5 hours) Recent Advancements in Marketing Research

Provide students with exposure to leading marketing scholars and their most current research and give them an opportunity to critically evaluate it.

Bus M&L 955 (5 hours) Seminar in Contemporary Marketing Problems

Review of current periodical literature and individual investigation by each student of a selected marketing problem of contemporary significance for seminar discussion and written report.

Psy 609 (4 hours) Introduction to Mathematical Models in Experimental Psychology

A survey of mathematical models and theories in important areas of experimental psychology; models of perceptual and cognitive processes, memory, and learning.

Psy 617 (4 hours) Neural Network Models in Psychology

Basic principles of neural network modeling and their applications in perception, memory, and language.

Psy 820 (4 hours) Fundamentals of Factor Analysis

Basic Common Factor Model and its application in psychology; model, communality estimation, factor extraction, orthogonal and oblique rotation, factor scores, confirmatory factor analysis use of computer programs.

Psy 830 (4 hours) Covariance Structure Models

Theory and methods of testing models of covariance structures; general mathematical model, identification, parameter estimation, goodness of fit, model modification, and the use of computer programs such as LISREL.

Psy 831 (5 hours) Seminars in Psychological Statistics

These special topics seminars focus on statistical practice within psychology and special treatment of psychological data. They include Experimental Design, Factor Analysis and Hierarchical Modeling, Bayesian Modeling, Computer Simulation, and Parameter Estimation.

SAMPLE ENROLLMENT FORM

**Graduate Interdisciplinary Specialization in
Quantitative Methods in Consumer Behavior**

For admission to the program please complete both pages of the Student Information Form as soon as possible and return it to the GIS Co-ordinator:

Attention: GIS in Quantitative Methods in Consumer Behavior
c/o Professor Angela Dean
Statistics Department, 323 Cockins Hall
The Ohio State University
1958 Neil Avenue, Columbus, OH 43210

STUDENT INFORMATION FORM

Name: _____

Department: _____

Campus Address: _____

Campus Phone: _____

Email Address: _____

Degree Program (eg. Ph.D. in Statistics): _____

Anticipated Graduation Date: _____

Advisor + telephone number: _____

Student Signature: _____

Date: _____

Advisor Signature: _____

Date: _____

PLAN OF STUDY FOR GIS

**Below please list the courses you have taken or are planning to take
for the Graduate Interdisciplinary Specialization in Survey
Research.**

Department	Course Number	Course Title	Credit Hours	Quarter Taken or Planned	Grade
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Student Signature: _____

Date: _____