**COURSE BACKGROUND**

Economics 801, Problems in Managerial Economics, is a one-trimester graduate course, which applies economic theory and methods to business administration. The course uses the theory of the firm to integrate and link economic theory (microeconomics and macroeconomics), decision sciences (mathematical economics and econometrics), and the functional areas of business (accounting, finance, marketing, personnel and resource management, and production) and shows how all of these topics are crucial components of managerial decision-making. The functional areas of business administration examine the business environment in which the firm operates and, as such, provide the background for decision making. Economic theory provides the analytical framework for deriving optimal decision rules, while decision science provides the tools of optimization and the estimation of economic relationships.

The course is divided into six major topic areas. Topic Area One provides an overview of managerial economics and the quantitative tools required for the course. Under this topic we review the concepts of differentiation, partial differentiation, and introduce the tools of matrix algebra. Each of these quantitative tools will be used extensively in the following topic areas. Topic Area Two introduces Consumer and Demand Theory. This section concentrates on methods and models used to estimate and forecast demand using the standard linear regression model. Topic Area Three focuses on production and cost theory, technological change, industrial innovation, and ends with an examination of Linear Programming as a management tool. Topic Area Four examines product and factor market structures, strategic behavior and pricing. In Topic Area Five we introduce Risk Analysis and Capital Budgeting Techniques which are used in short- and long-term investment and planning decisions. Finally, in Topic Area Six, we examine the role of the Government-Business Relationship and the competitive advantages of the firm in a global context.

**PREREQUISITES:** Economics 301 and 302, Math 355 (*Applied Calculus*), and Statistics 362 (*Statistics for Management II*)

**TEXTS**


SUPPLEMENTAL READINGS AND QUANTITATIVE REQUIREMENTS

Additional readings will be assigned to supplement the material in the required texts. When supplemental readings are assigned, they are considered required reading.

It may be helpful, on occasion, to refer to a basic economics text to supplement, clarify, and further explain the economic theories and other conceptual material found in the readings and presented in class. You may want to do the same with respect to a statistics text to aid in interpreting empirically based regression results, or a calculus text to review basic concepts associated with differentiation and partial differential of linear and nonlinear functions (especially, exponential and logarithmic functions).

The course assumes students have completed all the necessary prerequisites including the qualifying examinations in mathematics.

EXPECTED STUDENT OUTCOMES

Upon completion of this course, the student should be able to (1) describe the neoclassical theory of the firm, (2) use regression analysis to estimated demand, cost, and production functions, (3) model and develop econometric models using time series data and econometric software programs, (4) use break-even, capital budgeting techniques and risk analysis for assessing the firm’s development and competitive strategies, and (4) incorporate all of these tools as practical management techniques in the decision-making process.

INSTITUTIONAL MODALITIES/ACTIVITIES:

The Course will consist mainly of lectures and class discussion with homework exercises. All homework assignments are due one week from the assigned date. All homework is expected on the due date. Late homework will be assessed a 25% penalty. (See telefax number above). Students are expected to attend each class, read material prior to class, and to entertain the instructor with their knowledge of the course material.

GRADING

There will be weekly homework assignments with class discussion (15%), two mid-trimester examinations (25%) and final examination (25%), and an industry analysis with in-class presentation (35%).

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<th>Grading Scale</th>
<th>Percentage</th>
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<tr>
<td>Honors: A+</td>
<td>97 - 100</td>
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<tr>
<td>Above Standard</td>
<td>93 - 96</td>
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<tr>
<td>Standard</td>
<td>83 - 92</td>
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<tr>
<td>Qualifying</td>
<td>73 - 82</td>
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<tr>
<td>Below Qualifying</td>
<td>60 - 72</td>
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<tr>
<td>Non Qualifying</td>
<td>Below 60</td>
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Course Grade = \( \frac{.15(\text{Homework and Discussion}) + .25(\text{Midterms}) + .25(\text{Final}) + .35(\text{Paper})}{2} \)
WRITING ASSIGNMENTS:

The course will require a significant amount of writing and the expectation is that graduate students be able to demonstrate their writing ability in their work. All assignments, except quantitative exercises, are to be typed using rules of grammar flawlessly and to write well-organized and comprehensive papers. All assignments are to be organized sequentially and presented in a format which includes a cover page containing the student's name, social security number, title of class, section, and the number of the homework and assignment. Each question should be stated with the answer following. Pages are to be numbered and all references and/or documentation should be appended appropriately.

Whichever style you choose to use (Chicago Manual of Style, American Psychological Association, Modern Language Association, etc.) is up to you. If you need help please purchase or checkout guidebooks from the library on report writing. Examples of such aids are Barron's How to Write Themes and Term Papers, Turabian's A Manual for Writers of Term Papers, Theses, and Dissertations, or the Harbrace College Handbook. Students who have little or no experience in writing research papers should take one of the short courses in preparing a research paper offer by Governors State University.

<table>
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<tr>
<th>APA Style For Research Papers</th>
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<tr>
<td>Free Workshops, Fall 1997</td>
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<tr>
<td>Tuesday, September 16</td>
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<td>Saturday, September 27</td>
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<td>Friday, October 10</td>
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<td>Wednesday, November 5</td>
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All written assignments will be graded according to the following guidelines:

Above Standard:
A paper in this category will complete all tasks set by the assignment. It will be distinguished by lucid and orderly thinking, and may even introduce an original interpretation of the writing topic. It will be virtually free from errors in mechanics, usage, and sentence structure. There will be evidence of superior control of language. Finally, the paper will clearly show integration of the five topic areas covered in the course.

Standard:
Papers falling in this category may slight, but not ignore, one of the tasks of the assignment or deal with it only by implication; however, the writer will demonstrate a clear understanding of the topic. The paper will exhibit minor weaknesses in interpretation of the theory but will be free from errors in grammatical and sentence structure.

Qualifying:
Papers in this category show serious difficulty managing the tasks of the assignment and definite weaknesses in analytic thinking. This will be demonstrated by failing to integrate concepts in the topic areas of the course in a satisfactory manner. Additionally, the writer's control of language will be uncertain and error prone, with respect to grammatical and sentence structure.
Below Qualifying:
Papers in this category will fail to come to terms with the assignment by ignoring tasks. Also, there will be clear lack of understanding relevant concepts and their integration into a clear analytical and problem solving framework. There will be serious and frequent errors in sentence structure, usage, and mechanics.

Non Qualifying:
This category is reserved for the paper in which a combination of errors, conceptual confusion, and disorganization creates the impression of an inability to handle material at this level of analytical rigor. Additionally, sentence and grammatical usage is seriously below that expected of graduate students.

COURSE METHODOLOGY:
The framework of analysis consists of lectures, which provide the fundamental content of theories and concepts in the textbook and readings. The lectures will disseminate the most important elements and concepts; however, students are responsible for all readings and completing all homework assignments. The course focuses on the principal concepts and, more important, the practical application of the concepts using tools derived from the coursework. A critical element of the course is the development of critical analysis and problem solving skills. Much of this will be accomplished using both qualitative and quantitative methods so it is extremely important to develop problem-solving capabilities to be successful in this course. Thus, problem solving and interpretative skills are part of the toolkit derived from the successful completion of this course.

THE PARTICIPANTS ROLE IN THE COURSE
To achieve the highest standard in the course, A, the student will average 93 on homework and examinations. Students averaging higher than 96 are recommended to the Dean of their college for honors consideration. To master course work requires a minimum of three (3) hours of study for every hour of classroom time; that is, students should expect to spend 9 to 12 hours per week outside of class to prepare for each week’s class sessions. It is expected that you will plan your study, work, family, and leisure time accordingly.

The instructor provides 16 hours of office hours on a weekly basis. It is recommended that students first meet with the instructor if there are any questions regarding course materials. Students may also receive assistance by calling and leaving questions on the instructor’s voice mail (708.534.4058) at any time of the day or night, and your questions will be answered at the instructor’s earliest convenience. Students requiring additional assistance may consult the Student Development Center in Room B-1201, or call 708.534.4090. The Student Development Center provides tutorial assistance in Economics, English, and Mathematics.

You will demonstrate your mastery and understanding of the course material through class participation and discussion, the homework assignments, the mid-trimester and final examination, and the industry analysis report. If it becomes apparent through the class discussion that students are not staying current with assigned readings and/or are not coming to class adequately prepared, one or more one-hour essay exams on the assigned readings will be given.
• **Attendance and Participation**

You are expected to attend class, thus there are no excused absences. Because of the nature of the quantitative material presented, it is imperative you not miss any classes. As a graduate student studying for a professional degree you are expected to act in a responsible manner to assure your attendance in, preparation for, and participation in class. If you are ill, encounter a family emergency, or have a job assignment that requires you to be absent, due allowance will be given. However, you are responsible for notifying the instructor of any impending absence and arranging for the timely completion of any assignments. Attendance will be taken if necessary.

• **Ethical Behavior**

Each student is expected to follow the University’s requirements as published in the University Catalog, 1997-1999 for Academic Honesty (page 34) and the University Policy on Academic Honesty, which appears in the Student Handbook. Students are expected to fulfill academic requirements in an ethical and honest manner. This expectation pertains to the following areas:

1. the use and acknowledgment of the ideas and work of others,
2. submission of work to fulfill course requirements,
3. sharing of work with other students, and
4. appropriate behavior during examinations.

**About the Instructor:**

Anthony Paul Andrews is Professor of Economics and Liberal Studies, holding a joint appointment in the Colleges of Business and Public Administration and Arts and Sciences. Additionally, he is Research Director in the International Business and Global Grade Research Institute at GSU, responsible for econometric policy modeling. He received his B.A. in economics from Hampton Institute, and the M.A. and Ph.D. from the University of Pennsylvania, specializing in Econometrics/Statistics, Location Theory, and Economic Planning Theory.

Dr. Andrews has held economist positions with the Bureau of Economic Analysis in the Department of Commerce and the President’s Council of Wages and prices, both in Washington, D.C. He was Director of Development Planning for the State of Ohio and continues to consult for local, state and national governments through his consulting firm, Develop-Metrics (Pty) Ltd. Recent consultancies include stints with the Central Bank and Ministry of Finance and Development Planning for the Government of Botswana, the United Nations Development Programme (UNDP), International Labour Organization (ILO), Deloitte-Touche, and short-term consultancies in Guinea, Kenya, Sierra Leone, Zambia, Zimbabwe, the Food and Agricultural Organization in Rome, Italy, and the Oxford Food Research Institute, Oxford University.

Research interests: (1) cointegration analysis of time series, (2) forecasting and expectations indices, (3) labor market and firm location theory, (4) economic development planning, and (5) applied microeconometrics.