832. Statistical Methods for Business
Fall, Spring. 4(4-0) MTH 111, STT 315.
Open only to MBA candidates without background in statistics.
Statistics for analysis and research in business.

833. Decision-Making Models
Fall, Winter, Spring, Summer. 4(4-0) MGT 831, MGT 832; AFA 840 or concurrently.
Normative decision analysis in business under different assumptions of information availability.

834. Linear Optimization Models
Fall. 4(4-0) MGT 833; MTH 334 or EC 480.

835. Nonlinear Optimization Models
Winter, Summer. 4(4-0) Students may not receive credit for both MGT 835 and MGT 836. MTH 215 or MTH 229; MGT 834 or CHE 465. Interdepartmental and jointly administered with the Department of Chemical Engineering. Nonlinear optimization - examples and applications. Kuhn-Tucker Theory. Saddle point optimality conditions. Algorithms for problems with constraints. Unconstrained optimization. Introduction to search methods.

836. Applied Stochastic Processes for Business
Spring. 4(4-0) MGT 833, MTH 229, STT 422.
The structure and analysis of stochastic models common to business and economics. Topics may include the Poisson process, renewal-reward processes, discrete Markov processes, with examples from queuing, reliability, maintenance and inventory.

837. Systems Simulation
(937.) Fall. 4(4-0) MGT 833. Interdepartmental with the Department of Statistics and Probability.
The concept of a model, model building, characteristics of simulation models. Techniques of computer simulation. Simulation models in research and management planning/control. Validation and experimental design. Special purpose languages.

841. Materials and Logistics Management Policy
Spring, Summer. 4(4-0) MGT 800 plus 30 credits in the MBA Program. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
Case course that integrates the materials and logistics management program. Emphasis on problem recognition, applying course materials and preparation of plans that improve total systems performance.

844. Management Science Applications
Summer. 4(4-0) MGT 833.
Analysis of cases utilizing techniques of management science. Problem definition, data collection, and problem solving and implementation.

860. Corporation Management and Society
Winter. 4(4-0) MGT 806.
Analysis of the emerging character of administrative structure of the large corporation. Administrative autonomy, corporate government, stockholder and management relationships. Examination of ethics of decision making, strategic values and priorities basic to resource allocation decisions.

880. Organization and Control in the Political Economy: Institutions and Theory
Winter of even-numbered years. 4(4-0) Interdepartmental with and administered by the Department of Economics.
Organization and technique in choice and implementation of economic (especially planning, programming) functions of political authority.

885. Organization and Control in the Political Economy: Selected Problems
Winter of odd-numbered years. 4(4-0) with approval of instructor. Interdepartmental with and administered by the Department of Economics.
Analysis of role and tasks, appropriate techniques and organizational structures of political agencies in planning and management of complex programs.

890. Special Problems
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

906. Behavioral Research: Organization
Winter. 3 credits. MTA 905.
Concepts and methods of behavioral science research that are applicable to the study of organization as a scientific device in the development of tangible and intangible values and in the control of elements of business enterprise.

907. Seminar in Organizational Behavior
Fall. 4(4-0) MGT 806.
Directed reading on the behavior of individuals within business organizations. Theory and research in motivation, leadership, and group dynamics are covered.

912. Special Topics Research Seminar
Fall, Winter, Spring. 2 to 4 credits. May reenroll for a maximum of 12 credits. Approval of department.
Specialized topics in management.

949. Advanced Applied Stochastic Processes
Spring of odd-numbered years. 4(4-0) MGT 836. Interdepartmental with the Department of Statistics and Probability.
Selected topics from the following areas: Semi-Markov, Markov-renewal and regenerative process models; Markov and semi-Markov decision processes; decision theory; applications from production, inventory, reliability, queuing, and gaming theory.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

MARKETING AND TRANSPORTATION ADMINISTRATION

MTA

College of Business

292. Selected Topics
Fall, Winter, Spring. 3(3-0) or 4(4-0)
May reenroll for a maximum of 8 credits when a different topic is taken.
Selected subject matter of current interest in marketing: social, institutional, and managerial, etc., topics. Subject varies by terms.

300. Marketing Management in Business and Society I
Fall, Winter, Summer. 4(4-0) EC 300, AFA 301 or AFA 330.
Firm and consumer roles in the exchange system for goods and services. Competitive analysis of market structures and marketing management. Fitting product-service offerings to various customer group needs.

301. Marketing Management in Business and Society II
Fall, Winter, Spring. 4(4-0) Juniors, MTA 306.
Development of distribution, communication and pricing policies. Integration of product, distribution, communication and price policies into a marketing plan. Emphasis on financial aspects of marketing and impact on society.

303. Materials and Logistics Management Policy
Spring, Summer. 4(4-0) MGT 300 plus 30 credits in the MBA Program. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.
Case course that integrates the materials and logistics management program. Emphasis on problem recognition, applying course materials and preparation of plans that improve total systems performance.

304. Operations Planning and Control
Spring, Summer. 4(4-0) MGT 305 or approval of department. Interdepartmental with and administered by the Department of Management.
Managing the production system. Product development, process selection, facilities location and layout, staffing, materials, cost and quality control.
Courses

305. **Purchasing Management**
Fall, Winter, Spring. 4(4-0) MGT 303 or approval of department. Interdepartmental with and administered by the Department of Management.

311. **Personal Selling**
Fall, Winter, Spring, Summer. 3(3-0) MTA 300.
Theory, principles, methods and techniques of personal selling with application to different buyer-seller situations. Development of interpersonal communications skill. Career opportunities in selling.

313. **Sales Management**
Fall, Winter, Spring, Summer. 4(4-0) MTA 300.
Organization and administration of the firm's personal selling. Topics include: recruitment, selection, training, compensation, evaluation, development, and motivation of salesmen; market development, territory assignment, and quotas; segmental analysis and budgeting.

316. **Fundamentals of Statistical Inference**
Fall, Winter, Spring. 4(5-0) STT 315. Primarily for students in the College of Business. Interdepartmental with and administered by the Department of Statistics and Probability.
Description of sample data, applications of probability theory, sampling, estimation, tests of hypotheses.

317. **Quantitative Business Research Methods**
Fall, Winter, Summer. 4(5-0) STT 315. Interdepartmental with the Department of Statistics and Probability.
Application of statistical techniques to business decision making. Topics covered include applications of linear regression and correlation, analysis of variance, selected non-parametric tests, time series, and index numbers.

320. **Consumer and Buyer Behavior**
Fall, Spring. 4(4-0) MTA 300.
Consumer behavior characteristics, theories and research methods for marketing and problems and strategy solving. Emphasis on predicting and understanding purchase behavior for best firm/buyer needs match.

335. **Food Processing and Distribution Management**
Winter. 3(3-0) MTA 300 or FSM 200. Interdepartmental with Food Systems Economics and Management.
Analysis of problems faced in the food processing and distribution system. Includes functional interrelationships, consumer orientation and future development.

341. **Transportation Distribution Systems**
Fall, Winter, Summer. 4(4-0) MGT 305 or approval of department. Interdepartmental with the Department of Management.
Application of economic and business principles to transportation and distribution systems. Functional analysis of all major transport modes. Identification of major issues, analysis of alternatives and discussion of probable future outcomes.

342. **Traffic Management**
Winter, Spring, Summer. 4(4-0) MGT 305 or approval of department. Interdepartmental with the Department of Management.
Basic practices related to purchasing and operating transportation services for private and public enterprises.

351. **Retail Management**
Fall, Winter, Spring, Summer. 4(4-0) MGT 300, MTA 301 or concurrently.
Management methods, locational analysis, store organization, personal planning, merchandising, buying and pricing techniques and customer service policies for retail firms. Survey of retailing and its role in distribution.

400H. **Honors Work**
Fall, Winter, Spring. 1 to 15 credits.
Approval of department.
Investigates models, concepts and research findings of particular significance to effective decision making in administration of marketing and transportation systems.

403. **Research and Negotiation for Purchasing Materials and Management**
Winter. 4(4-0) MGT 305 or approval of department. Interdepartmental with and administered by the Department of Management.
Applied research and planning focusing on the purchasing and materials management functions in organizations. Preparation for and conducting purchase negotiations. Field research studies. Administration of the research and planning effort.

405. **Operations Management Topics**
Spring. 4(4-0) MGT 305 or approval of department. Interdepartmental with and administered by the Department of Management.
Consideration of current and controversial questions in operations management. Field experience to study operations and policies in business. Emphasis on new technology and government regulations.

407. **Materials and Logistics Policy**
Winter, Spring. 4(4-0) MGT 305 plus 12 credits in MGT Program. Interdepartmental with the Department of Management.
Analysis of comprehensive cases incorporating topical coverage of the entire materials and logistics management program.

409. **Field Studies in Business**
Fall, Winter, Spring. Summer. Variable credit. May be repeated for a maximum of 8 credits.
Major independent research or observation, study, and work in selected business firms. Designed to supplement classroom study in such a way as to make maximum contribution to student's total educational experience.

414. **Marketing Research**
Fall, Winter, Summer. 3(5-0) MTA 301, MTA 317.
Research process as an aid to decisions making in marketing management. Specific attention to the planning of research and gathering analysis and interpretation of data.

415. **International Market Systems**
Fall, Winter. 4(4-0) MTA 300.
Development of criteria for evaluating foreign markets. Design of international organization and marketing systems. Study of major markets, modes, and strategies of international trade and operations. Applications through reports and case studies.

418. **Marketing Development and Policies**
Fall, Winter, Spring. Summer. 4(4-0) MTA 305, MTA 411 and at least 3 additional credits of MTA electives.
Study and integration of major tasks and decisions involved in developing and marketing products. Comprehensive discussion of cases involving different decisions for a variety of products.

439. **Advanced Food Processing and Distribution Management**
Fall. 3(3-0) MTA 335. Interdepartmental with Food Systems Economics and Management.
Managerial principles and techniques applied to food processing and distribution. Emphasizes adjustment to changing social, economic and internal company environment. Student interaction with industry, labor and government representatives. Field trips, special projects.

445. **Physical Distribution Management**
Fall, Winter, Spring. 4(4-0) MGT 305 or approval of department. Interdepartmental with the Department of Management.
Micro analysis of private and public physical distribution systems. Emphasis on component parts of the movement system; analytical tools used in planning, implementing and controlling the system.

452. **Retail Policies and Problems**
Spring. 4(4-0) MTA 351.
Analysis of retail problems with examination of selected current major problem areas. Critical review of budgetary and other controls, standards and techniques used to achieve management objectives.

500. **Materials and Logistics Management**
Fall, Winter, Spring, Summer. 4(4-0) Graduate students. Interdepartmental with and administered by the Department of Management.

501. **Operations Management**
Winter. 4(4-0) MGT 305 or approval of department. Interdepartmental with and administered by the Department of Management.

802. **Research Analysis for Marketing Decisions**
Fall, Spring. 4(4-0) Use of research techniques as an aid in marketing decision making. Research process involving research problem definition, hypothesis formulation, data collection, interpretation and presentation. Class projects may be used.

803. **Purchasing Administration**
Winter, Spring. 4(4-0) MGT 800. Interdepartmental with and administered by the Department of Management.
804. Marketing Concepts and Processes
Fall, Winter. 4(4-0)
The business is considered relative to its external environment. Institutions comprising the marketing system, the principal environmental opportunities and constraints facing the marketing manager and the major marketing informational, control and coordination devices available to the firm will be studied.

805. Marketing Models, Theories, and Strategies
Fall, Winter, Spring, Summer. 4(4-0) MTA 804.
Analysis of marketing functions, programming marketing effort, and control and coordination are considered within the context of industrial and consumer demand. Strategic and decision-making aspects of marketing are stressed.

808. Emerging Issues in the Business Environment
Winter, Spring. 4(4-0) May reenroll for a maximum of 12 credits if course content changes. Thirty credits of MBA core program, or approval of department.
Selected significant current organization, social, political, economic and cultural issues are examined in relation to business policy and decision making. Discussions, readings and research reports. Topics selected may vary from term to term.

809. Transportation Distribution Strategies
Fall, Winter, 4(4-0) MGT 800. Interdepartmental with the Department of Management.
Planning and control of the enterprise's transportation and physical distribution system. Emphasis on detailed examination of component parts of the movement storage system.

811. Seminar in Marketing
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 15 credits.

812. Systems Design Modeling
Spring. 4(4-0) MGT 800. Interdepartmental with the Department of Management.
Research procedure and planning models for design of the firm's logistical system. Emphasis on situational analysis, research methodology, data analysis, analytical techniques and implementation.

815. Materials Forecasting
(MGT 802) Fall, Spring. 4(4-0) MGT 800 or approval of department. Interdepartmental with and administered by the Department of Management.
Cause and consequences of supply dynamics. Analyses and forecasts of national and international materials and purchasing business trends. Influences of material resource problems on policies, strategies and behaviors.

816. Transportation Policy and Plans
(810) Fall, Winter. 4(4-0) MGT 800. Interdepartmental with the Department of Management.
An operational model and theoretical perspective on national policies that are apt to shape the future of the transportation system. Interaction of government, carrier, and user logistics and distribution strategies.

821. Production and Inventory Planning and Control
Winter, Spring. 4(4-0) MGT 800 or approval of department. Interdepartmental with and administered by the Department of Management.
Theory and practice of production and inventory planning and control. Focus on computer based planning systems for material requirements including aggregate planning, master scheduling, capacity planning, shop floor control and inventory planning.

823. Seminar in Retailing
Winter. 4(4-0)
Critical analysis of available generalizations concerning the economic, social, and commercial role of retailing. Special attention to concepts of retail competition and productivity. Emphasis on research in improving retail efficiency.

824. Marketing Channel Management
Spring. 4(4-0) MTA 805.
Seminar in selected organizational, social, political, economic and cultural issues related to management in marketing channels.

831. Food Marketing Management
Fall, Spring. 4(4-0) May reenroll for a maximum of 8 credits. Interdepartmental with the Department of Agricultural Economics.
Food industry adjustment to changing social, economic and internal company environment. Managerial principles and techniques applied to food processing and distribution. Student interaction with industry, labor and government representatives.

841. Materials and Logistics Management Policy
Spring, Summer. 4(4-0) MGT 800 plus 30 credits in the MBA Program. Interdepartmental with the Department of Management.
-case course that integrates the materials and logistics management program. Emphasis on problem recognition, applying course materials and preparation of plans that improve total systems performance.

851. Market Behavior and Competitive Strategy
Fall, Winter, Summer. 4(4-0) MTA 805.
Industrial and consumer market structure and behavior and their impact upon the firm's competitive operations and actions.

853. Market Programming
Winter, Spring, Summer. 4(4-0) MTA 805.
Planning processes leading to programming the various elements of market cultivation. Major emphasis is given to the development of a total marketing strategy for the firm. Case analysis.

854. Problem-Solving Processes in Marketing
Fall, Spring. 4(4-0) MTA 853.
The problem-solving process is approached through the investigation and solution of current marketing problems by research teams.

855. Market Cost-Revenue Analysis
Winter. 4(4-0) One course in accounting and one in marketing. Interdepartmental with the Department of Finance and Insurance.
Analytical tools for use in planning and controlling marketing activities. Emphasis on the determination of factors causing market cost differences and the assignment of costs to those factors. Application of tools to determination of expenditure-revenue patterns and market potentials.

860. International Business
Fall, Summer. 4(4-0) MTA 805.
The economic environment within which the international firm operates is presented. Special emphasis on relating trade and payments theory, regional analysis and economic development strategy formulation of the firm. Marketing, financial, and organizational factors are considered.

862. International Marketing
Winter. 4(4-0) MTA 880.
Models for headquarters planning and control of international marketing operations are developed. Social, cultural, institutional, and economic variables are considered in studying marketing operations in foreign environments.

863. Problems in International Business
Spring. 4(4-0) MTA 882.
Examination of strategies and organization for international business. In-depth consideration of headquarters and overseas personnel, marketing, financial and legal issues.

890. Special Problems
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

905. Analysis of Business Enterprise Systems
Fall. 3 credits. MTA 880, MGT 806.
Research concepts and scientific methods for the study of business enterprise systems. The design of research, formulation of hypotheses, concepts of measurement and use of quantitative methods in the study of business systems.

909. Theory of Transportation-Distribution Systems
Fall. 4(4-0)
Examines the functions of transportation-distribution systems. Develops the relevant elements of networks, systems, and economic theory with empirical design. Applications to the design evaluation and control of representative macro and micro systems.

910A. Advanced Research in Marketing I
Winter. 4(4-0) Second-year doctoral students only.
Advanced concepts and quantitative methods in the scientific investigation of market phenomena and the tools of market cultivation.

910B. Advanced Research in Marketing II
Spring. 3(3-0) MTA 910A.
Continuation of MTA 910A.

911A. History of Market Thought
Fall. 4(4-0) May reenroll for a maximum of 15 credits. MTA 881.
Traces the evolution of marketing institutions, techniques, theories and criticism. The influence of changing environmental and technological factors on marketing practice and thought. Readings in retrospective and original material, discussion and research paper.

911B. Seminar in Macro Marketing
Winter. 4(4-0) May reenroll for a maximum of 15 credits. MTA 911A.
Examines the relationships between competition, marketing and corporate and economic growth. Emphasis is given to a functional examination of competition and the central role of innovation in the process.
### Descriptions – Marketing and Transportation Administration

#### Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 912</td>
<td>Research Methodology in Transportation-Distribution Systems</td>
<td>Winter, 4(4-0) MTA 912, MTA 912. A study of research methodology in the design and administration of transportation-distribution systems. Emphasis on technique and methodology for conducting system design studies and evaluation of common implementation problems.</td>
</tr>
<tr>
<td>MTH 941</td>
<td>Transportation-Distribution Development Policy</td>
<td>Spring, 4(4-0) MTA 999, MTA 912. Applications in theory, principles, and processes developed in MTA 909 and MTA 912 to the design of research processes and reports in significant transport and distribution problems.</td>
</tr>
<tr>
<td>MTH 957</td>
<td>Seminar in Micro Marketing</td>
<td>Spring, 4(4-0) MTA 911A. Examine the current state of theory concerning the planning and implementation of marketing strategies and programs, and tries to identify where future research is needed and/or will be most useful to marketing and business managers.</td>
</tr>
<tr>
<td>MTH 999</td>
<td>Doctoral Dissertation Research</td>
<td>Fall, Winter, Spring, Summer. Variable credit. Approval of department.</td>
</tr>
</tbody>
</table>

### MATHEMATICS

#### College of Natural Science

One and one-half years of high school algebra and one year of geometry and a satisfactory score on the placement test are prerequisites for all courses in the Department of Mathematics which carry credit.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 0813</td>
<td>Elements of Algebra</td>
<td>Fall, Winter, Spring, Summer. (3-3) See page A-1 item 3.1 Current enrollment in MTH 1033. Fractions, decimals, rational numbers, polynomials, factoring, simplifying algebraic expressions, progressions, reciprocals, linear equations, integer exponents, applied problems, coordinate systems, graphing, solving equations by graphing. Approved through Spring 1984.</td>
</tr>
<tr>
<td>MTH 0823</td>
<td>Intermediate Algebra</td>
<td>Fall, Winter, Spring, Summer. (2-2) See page A-1 item 3.1 Current enrollment in MTH 1043, one year of high school algebra, satisfactory score on placement exam. Properties of real numbers, polynomials, factoring, exponents, roots and radicals, linear and quadratic equations, progressions, operations on algebraic expressions, simplifying algebraic expressions. Approved through Spring 1984.</td>
</tr>
<tr>
<td>MTH 1033</td>
<td>Elements of Algebra</td>
<td>Fall, Winter, Spring, Summer. 2(2-0) Current enrollment in MTH 0813. Fractions, decimals, integer number properties, algorithms of arithmetic, simple factoring, simplifying algebraic expressions, parentheses, reciprocals, linear equations, integer exponents, applied problems, coordinate systems, graphing, solving equations by graphing. Approved through Spring 1984.</td>
</tr>
<tr>
<td>MTH 1043</td>
<td>Intermediate Algebra</td>
<td>Fall, Winter, Spring, Summer. 3(3-0) Current enrollment in MTH 0823, one year of high school algebra, satisfactory score on placement exam. Properties of real numbers, polynomials, factoring, exponents, roots and radicals, first and second degree equations, linear inequalities, complex numbers, word problems, system of equations, operations on algebraic expressions, simplifying algebraic expressions. Approved through Spring 1984.</td>
</tr>
<tr>
<td>MTH 108</td>
<td>College Algebra and Trigonometry I</td>
<td>Fall, Winter, Spring. 5(5-0) 1-1/2 high school units in algebra and satisfactory score on placement test, or MTH 0823; 1 high school unit in geometry. Not open to students with credit in MTH 111. Number systems; variables; functions and relations; mathematical induction; exponents and radicals; elementary theory of equations; binomial theorem; determinants, matrices and systems of equations.</td>
</tr>
<tr>
<td>MTH 109</td>
<td>College Algebra and Trigonometry II</td>
<td>Fall, Winter, Spring. 5(5-0) MTH 108 or MTH 111. Elementary combinatorial analysis, binomial theorem, vectors and matrices, convex sets and linear programming, graph theory, applications to theory of games.</td>
</tr>
<tr>
<td>MTH 110</td>
<td>Finite Mathematics with Applications</td>
<td>Fall, Winter, Spring. 5(5-0) MTH 108 or MTH 111. Elementary combinatorial analysis, binomial theorem, vectors and matrices, convex sets and linear programming, graph theory, applications to games of chance.</td>
</tr>
<tr>
<td>MTH 111</td>
<td>College Algebra with Trigonometry</td>
<td>Fall, Winter, Spring. 5(5-0) 1-1/2 years of high school algebra, 1 year of high school geometry, satisfactory score in algebra placement examination, trigonometry or MTH 102 or concurrently. Not open to students with credit in MTH 108 or MTH 109. Sets and equations, simultaneous equations and matrices, vectors, inequalities, functions and relations, inverse functions, elementary theory of equations, trigonometric equations and identities, polar coordinates, parametric equations, straight line analytic geometry.</td>
</tr>
<tr>
<td>MTH 112</td>
<td>Calculus and Analytic Geometry I</td>
<td>Fall, Winter, Spring. 5(5-0) MTH 109 or MTH 111. The sequence MTH 112, MTH 113, MTH 214, MTH 215, is an integrated course in calculus and analytic geometry, covering derivatives, curve sketching, definite and indefinite integrals, area volume, transcendental functions, vector analysis, solid geometry, partial differentiation, multiple integrals, infinite series, power series.</td>
</tr>
<tr>
<td>MTH 113</td>
<td>Calculus and Analytic Geometry II</td>
<td>Fall, Winter, Spring. 5(5-0) MTH 112. A continuation of MTH 112.</td>
</tr>
<tr>
<td>MTH 115</td>
<td>Calculus and Analytic Geometry III</td>
<td>Fall, Winter, Spring. 5(5-0) MTH 114. Continuation of MTH 113.</td>
</tr>
<tr>
<td>MTH 116</td>
<td>Calculus and Analytic Geometry IV</td>
<td>Fall, Winter, Spring. 5(5-0) MTH 115. Continuation of MTH 113.</td>
</tr>
<tr>
<td>MTH 123</td>
<td>Calculus II</td>
<td>Fall, Winter, Spring. 5(5-0) MTH 112, not open to engineers, physical science or mathematics majors or to students with credit in MTH 112. The second of a two-semester course in primarily single variable calculus with and introduction to several variables for students who want only one or two terms of calculus.</td>
</tr>
<tr>
<td>MTH 190</td>
<td>Freshman Mathematics Seminar</td>
<td>Winter, Spring. 3(3-0) Freshmen Mathematics majors; prior or concurrent calculus enrollment. Intended to introduce mathematics majors to the type of mathematical reasoning and subject matter they can expect to encounter in advanced mathematics courses. Specific content will vary.</td>
</tr>
<tr>
<td>MTH 201</td>
<td>Mathematical Foundations for Elementary School Teachers</td>
<td>Fall, Winter, Spring, Summer. 4(4-0) MTH 201, elementary education majors. Fundamental concepts and processes of mathematics for prospective elementary school teachers.</td>
</tr>
<tr>
<td>MTH 204</td>
<td>Applied Mathematics in Elementary School</td>
<td>Winter, Spring. 4(4-0) MTH 201, elementary education majors. Concepts and applications of algebra and geometry for prospective elementary teachers.</td>
</tr>
<tr>
<td>MTH 214</td>
<td>Calculus and Analytic Geometry IV</td>
<td>Fall, Winter, Spring. 4(4-0) MTH 213. Calculus and Analytic Geometry III.</td>
</tr>
<tr>
<td>MTH 216</td>
<td>Mathematics of Finance</td>
<td>Winter. 3(3-0) MTH 108 or MTH 111. Mathematical theory of interest with application to such topics as ordinary, due, and deferred annuities, amortization of debts, depreciation, capitalized cost, purchase price of bonds.</td>
</tr>
<tr>
<td>MTH 290</td>
<td>Special Topics in Mathematics</td>
<td>Fall, Winter, Spring. 1 to 5 credits. May reenroll for a maximum of 9 credits. Approval of department. Individualized study adapted to the preparation and interests of the student. Topics studied will generally supplement and enrich the regular course.</td>
</tr>
</tbody>
</table>