

Department of Economics and Finance

John Lee, Chair
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The mission of the graduate program in economics is to provide students with advanced studies in economic theory and research methodology. To accomplish its mission, the Department of Economics and Finance offers two degree programs: the Master of Arts (M.A.) with a major in Economics and the Doctor of Arts (D.A.) with a major in Economics. The Department's approach to these degree programs is global, interactive, and innovative. In the M.A. program, students are offered three curricular paths: general economics, Industrial Relations, and Financial Economics. M.A. students in economics are offered preparation for careers in private business and public service. The focus of the M.A. program is on decision analysis and applied research. D.A. students in economics are trained for teaching careers in higher education. The D.A. provides students with the opportunity to combine advanced training in economics with educational pedagogy and applied research.

The required test score for admission to both masters' programs is 30 on the Miller Analogies Test or a satisfactory score on the Graduate Records Examination (GRE). Admission to the doctoral program normally requires a score of 900 or better on the GRE.

Requirements for the Master of Arts (5000 and 6000 level)

1. Candidates entering the M.A. program must have completed certain foundation courses. Each candidate's record is carefully examined to determine whether these functional areas have been satisfactorily covered in previous academic work. The foundation areas include:
 Intermediate-level Macroeconomics
 Intermediate-level Microeconomics
 Intermediate-level Quantitative Methods
 The M.A. advisor will notify the student of any deficiencies in the foundation courses. Students lacking work in these areas must take the requisite undergraduate courses.
2. Candidates for the M.A. in Economics or the M.A. in Economics with a concentration in Industrial Relations must complete a minimum of 30 semester hours if a thesis is written or a minimum of 33 semester hours if a

thesis is **not** written. At least 24 semester hours must be in courses numbered exclusively as 6000-level graduate courses.

Major in Economics

1. Candidates choosing a major in economics must complete a minimum of 18 semester hours of economics including ECON 6110, 6120, and 6620.
2. Candidates can include a minor in their degree programs. A minor comprises 12 hours of approved courses. A list of graduate minors can be found on page 19.
3. Students not electing a minor can include a cognate area of up to 6 semester hours in their program. Cognate areas can be formed from courses in such fields as accounting, agriculture, finance, geography and geology, history, industrial studies, insurance, management, marketing, mathematics, political science, psychology, real estate, and sociology.
4. The student, with the assistance of the M.A. advisor, must file a Candidacy Form prior to the completion of 24 credit hours.

Major in Economics with a Concentration in Financial Economics

The mission of the concentration in Financial Economics is to provide students with the intellectual foundation and technical skills needed to enter careers as financial economists and analysts in private companies and public agencies. The Economics major with a concentration in Financial Economics requires the general M.A. core courses: ECON 6110, 6120, and 6620. In addition, a candidate must complete ECON 6460, 6730 and FIN 6710, 6740. An additional six hours of guided electives must be chosen from the following courses: ECON 6430, 6450, 6530, FIN 6720 or 6860. The remaining six hours are general electives. The M.A. advisor must approve the selection of the general electives.

Major in Economics with a Concentration in Industrial Relations

1. Candidates choosing the Industrial Relations concentration must complete the following courses: ECON 6000, 5620 (or 6620), 6500, 6510, and 5390. An additional 9 hours must be completed from the following courses: ECON 6520, 6440 (Industrial Relations topic only), 5510, 5490, and 5420. Students without substantial experience in the field of industrial relations are strongly encouraged to complete ECON 5420, 5490, and 5510 as initial courses in the Industrial Relations concentration. Up to 9 credits of substitutions may be made by passing competency tests that are administered and evaluated by industrial relations faculty. Courses designated for possible substitutions are 5390, 5420, 5490, and 5510. Before taking the competency tests the student, industrial relations faculty, and M.A. advisor will agree on the

courses to be substituted for those negated by any successfully passed competency exams. The remaining credit hour requirements are electives. Courses listed above and not selected to fulfill the above requirements may be taken as electives, but students are strongly encouraged to consider interdisciplinary options from the following: management, engineering technology and industrial studies, psychology, sociology, actuarial science, political science, and school personnel service education. The M.A. advisor in consultation with the industrial relations faculty must approve acceptable courses.

Comprehensive Examinations

1. Candidates must successfully complete a written comprehensive examination that may be taken no more than twice. For the major in Economics, the comprehensive examination covers the three core areas: macroeconomics, microeconomics, and Econometrics I. For the major in Economics with a concentration in Financial Economics, the comprehensive examination includes macroeconomics, microeconomics, and a financial economics field examination. For the major in Economics with a concentration in Industrial Relations, the comprehensive examination encompasses four types of competencies:
 - a. applied technical analysis relevant to industrial relations practice including time values, regression analysis, and other computational methods that are generally based on ECON 5390, 5420, 6000, 6510, or 6620 (or 5620);
 - b. conceptual synthesis of Industrial Relations theory, applications, and issues from required and elective course content;
 - c. a specialty area defined by collaboration between the student, M.A. advisor, and Industrial Relations faculty, e.g., legislation and regulation of labor markets and employment, demographic influences upon the workplace, and technology change and the workplace; and
 - d. a synthesis of international issues taken from the content in the core and elective courses.
2. Before taking the comprehensive examination, the student is expected to attend and actively participate in regularly scheduled departmental student/faculty workshops where research papers are presented and discussed by the participants.

Requirements for the Doctor of Arts (6000 and 7000 level)

1. There are two alternatives available:

Alternative #1

A program with a single teaching field: 48 semester hours above the master's level with at least two-thirds of the program on the 7000 level. 5000-level courses may not be applied. Work in economics will consist of at least 24 semester hours of classwork, plus 6 semester hours of internship, plus 6 semester hours for the dissertation.

Alternative #2

A program with two teaching fields: 60 semester hours above the master's level with at least two-thirds of the program on the 7000 level. 5000-level courses may not be applied. Work in economics will consist of at least 18 semester hours of classwork, plus 6 semester hours of internship, plus 6 semester hours for the dissertation. Work in the second teaching field will consist of at least 18 semester hours of classwork in any subject which is offered as a major at the master's level (but see exceptions, page 42).

2. Prerequisites for **Alternative #1** include at least 18 hours of economics at the undergraduate level and 20 hours at the master's level. Students who elect **Alternative #2** must also have completed at least 18 hours of undergraduate credits in the second teaching field **except** when the second teaching field selected is a business area. If the second teaching field selected is a business subject, then the student must complete the undergraduate prerequisite or foundation courses for the M.B.A. listed under item #2, page 63. Since Business Administration is broadly defined to cover several different business disciplines, a second teaching field in this area could include courses in either finance, accounting, information systems, management, or marketing.
3. A core of professional education must be completed and will consist of at least 12 semester hours, which must include FOED 7520 and 7560 and SPSE 7540 and 7550.
4. A doctoral committee will be appointed.
5. The student, with assistance of the graduate advisor, must file a Candidacy Form prior to the completion of 24 credit hours.
6. Qualifying examinations as described on page 43 must be completed. Before the qualifying examination, the student is expected to attend regularly scheduled departmental faculty/student workshops and make at least two workshop presentations. If Business Administration is selected as a second teaching field, qualifying examination requirements for that field are satisfied by the successful completion of B AD 6980 Business Policy.
7. The student must successfully defend a dissertation prospectus and then prepare the dissertation.
 - a. The Dissertation Prospectus
The dissertation prospectus should conform to the specifications given on page 43.
 - b. Type of Dissertation
Guidelines for selecting the dissertation topic are given on page 44.
 - c. The Defense of Dissertation Seminar
Guidelines are given under the discussion of the D.A. degree on page 44. After the candidate has successfully defended the proposed problem he/she will develop, with the supervision of the advisory committee, this proposed problem into a complete dissertation. The candidate will be notified in writing of the committee's approval.

Courses in Economics [ECON]

- 5310 (531) Public Finance II.** Three credits. (Same as FIN 5310.) Prerequisites: ECON 2410 and 2420. Current issues in taxation, theory of income taxation, consumption taxes, property and wealth taxes. Advanced treatment of tax incidence, tax efficiency, income distribution, fiscal federalism, and state and local budget issues. Students are required to complete a term project resulting in a paper available for peer review and a class presentation.
- 5390 (539) Employee Benefits.** Three credits. (Same as FIN 5390.) Includes descriptive review and taxation, legislative, and administrative dimensions of the major components of employee benefit plans such as retirement systems, deferred compensation plans, health insurance, death benefits, disability benefits, paid and unpaid time off. Technical analysis and problem solving emphasized to develop applied skills. Social insurance and international benefits integrated.
- 5400 (540) Business and Government.** Three credits. Structure, conduct, and performance of American industries; public policies toward business; economic analysis of these policies.
- 5420 (542) Labor and Human Resource Economics.** Three credits. Current issues and theories, returns to training and education (human capital), earnings differences; theoretical interpretation and empirical economic impacts of unions, government regulation, and international forces upon labor relations and labor markets; human resource information systems (spreadsheet applications) and integration of Internet information sources and forensic analysis.
- 5440 (544) International Economics.** Three credits. Differences between domestic trade and international trade and foundations of international trade; economic effects of free trade and restricted trade; mechanisms of international payments and structure of balance of payments; history and contemporary issues of trade policies and world monetary systems.
- 5470 (547) Economic Development of the Third World.** Three credits. Conditions and problems of the less developed countries; causes, processes, and consequences of economic development; introduction to basic growth models, development theories, and strategies for development. Economic as well as non-economic factors studied.
- 5490 (549) Industrial Relations Legislation** Three credits. Effects of domestic and international legislation and regulation of governments on the practical functions of labor markets and employment relations in the public and private sectors. Specific dimensions include unions and other collective and collaborative institutions, workforce diversity, and the impacts of technology. Domestic and international electronic resources heavily integrated into learning experiences based on research and analysis.
- 5510 (551) Unions and Collective Bargaining.** Three credits. Collective bargaining contract administration and alternative dispute resolution mechanisms. Information technology tools. Analytical focus on the impacts of total compensation agreements, strike strategies, and the interdependent influences of the union and non-union sectors of the economy. Practical cases emphasized. A brief international comparative survey of unions and other collective relationships included.
- 5620 (562) Econometrics and Forecasting.** Three credits. Prerequisites: Q M 2610 and MATH 1810 or equivalent. Application of mathematical and statistical techniques to economic problems. Introduces econometric model construction and estimation and related problems. Requires use of econometric computer package.
- 5890 (589) Internship in Economics.** Three credits. Prerequisite: Graduate status and recommendation of advisor. Supervised work experience in cooperating business firms or government agencies together with specialized academic study relating to the work experience.
- 5990 (599) Problems in Economics.** Three credits. Problems for intensive study are chosen in joint consultation between student and instructor.
- 6000 (600) Managerial Economics.** Three credits. Prerequisites: ECON 2410 and 2420 or 4570 or equivalent. Primarily for M.B.A. students with particular attention given to business administration and finance topics including demand analysis, production and cost decisions, quantitative market analysis, capital budgeting, and alternative theories of the firm. Special emphasis on case studies, software applications, and interpretation of economic meanings of related analyses.
- 6030 (603) Survey of Economic Theory.** Three credits. Overview of micro and macro economic principles with an emphasis on applications to decision making in a competitive market environment. **May not be used for elective credit in graduate business degree programs.**
- 6100 Mathematical Methods for Economics.** Three credits. Preparation for core courses in economics. Covers all essential mathematical methods, including matrix algebra, differential and integral calculus, constrained optimization, the use of differential and difference equations in dynamic analysis, the basics of optimal control and stochastic calculus.
- 6110 (611) Macroeconomics I.** Three credits. Prerequisites: ECON 3510 and 5900 or permission of the instructor. Measurement concepts in macroeconomics, schools of macroeconomic thought, traditional models of aggregate demand and supply, open economy models and issues, and new approaches to macroeconomics. Computer applications.
- 6120 (612) Microeconomics I.** Three credits. Prerequisite: ECON 6100. Intensive review of the structure of microeconomic theory including optimization algorithms, envelope theory, preference axioms, intertemporal choice, alternative forms of cost and production functions, behavior under uncertainty, pricing information, market strategies, game theory, general equilibrium, social choice and externalities.
- 6200/ 7200 Economics of Education.** Three credits. Prerequisite: ECON 6120 or permission. The role of education in creating human capital, the existence of externalities, the returns to education to the individual and society, the education "industry," and the issues surrounding education reform.
- 6390/ 7390 Social Insurance, Pensions, and Benefits.** Three credits. Prerequisites: ECON 4390/5390 (or equivalent). An intensive survey of policy and practice in employee benefits, with an in-depth examination of pension plans. Covers an interdisciplinary mix of economics, accounting/finance, law and regulation.
- 6400 (640) Economics of Health Care.** Three credits. Applications of microeconomics to analysis of the health care delivery system in the United States. Major issues include the private and public demand for health care, supply of health care, cost of health care, the pricing of health care, and the analysis of the various health care reform policies of the industry. Examines how economics can provide valuable insights into the above problems of social choice.

- 6430 (643) Seminar on Public Finance.** Three credits. (Same as FIN 6430.) Examines the role of government in the allocation and distribution of society's resources. Topics include theories of government sector growth, public and quasi-public goods, externalities and agency theory, transitivity and completeness of voting preferences, income redistribution and economic justice, social insurance, health care programs, tax shifting and incidence analysis, efficiency and equity in taxation, and efficiency and redistributive aspects of deficit financing. Topics may involve case studies such as budget formulation, environmental policies, payroll taxes, and alternative tax structures.
- 6440 (644) Special Topics in Economics.** Three credits. Independent study of a particular topic selected by the student and approved by the instructor. Provides an opportunity to study special areas of interest for which regular courses are not offered.
- 6450 (645) Seminar on Monetary Policy.** Three credits. (Same as FIN 6450.) Prerequisite: ECON 3210 or equivalent recommended. Objectives and limitations of monetary policy, alternative monetary theories underlying policy decisions and the controversy among theories, transmission channels of monetary policy, alternative strategies used to achieve the objectives of monetary policy, practical considerations in the execution of monetary policy, global linkages and monetary policy, and the effects and consequences of policy decision on economic activity and business decisions.
- 6460/ 7460 (646) Seminar on Financial Markets.** Three credits. (Same as FIN 6460/7460.) Prerequisite: FIN 3000 or 3010 or 6000 or equivalent. Credit flows within the U.S. and the global economies, the economic and financial forces influencing the general level of interest rates and the relationship among interest rates, the characteristics of key short- and long-term financial assets, new financial instruments, derivative instruments, global financing linkages, global linkages among financial instruments and among national economies, and interest rate risk, including the measurement and means of protection.
- 6470 (647) Seminar in Economic Growth and Development.** Three credits. Prerequisites: ECON 2410 and 2420 and permission of instructor. Satisfies the M.B.A. international course requirement. Critical analysis of causes, processes, and consequences of economic development; evaluation of various policies and strategies for economic development; introduction to advanced growth models and theories. Special emphasis on the less developed countries.
- 6500 (650) Modern Issues in Labor and Industrial Relations.** Three credits. A survey of labor market and employment relations issues evolving in our changing economic environment. Coverage includes the concepts of efficiency, equity, and ethics of market and institutional behavior and economic issues related to work force demographics and work place organization. Distinction drawn between cooperative and competitive models of economic organization and outcomes in the employer-employee relations environment. Internet labor market information sources and international comparisons incorporated.
- 6510/ 7510 (651) Theory and Analysis in Labor Economics and Industrial Relations.** Three credits. Prerequisite: ECON 4570 or 6000 or 4420/5420 (or equivalent of either). Recommended prerequisites: Courses or equivalent experience involving financial computations, spreadsheet applications, and statistical software. Micro and macro theory of labor demand and supply and government policy implications, economic theory and measurement of human capital, returns to education, discrimination, income distribution, and impacts of international trade.
- 6520 (652) Special Media Projects.** Three credits. Non-traditional learning experiences. Approval includes faculty and student written mutual agreement and conformance to departmental standards for independent study. Examples of special projects include production of CDs, DVDs, cable TV programming, Internet projects, internships that clearly add non-redundant learning experiences, or highly applied projects that demonstrate the integration of information technologies into mainstream business or other organization decision making.
- 6530 (653) International Trade Theory and Policy.** Three credits. Prerequisite: ECON 5440 or equivalent background recommended. Advanced study of the key topics covered and introduction to other topics not covered in ECON 5440. Critical examination of major issues and evaluation of latest theories in international trade and monetary relations.
- 6540 (654) Japanese Society and Business.** Three credits. (Same as SOC 6710.) Japanese economy, business practices, and social and physical environment in comparison with those in other countries, particularly the United States.
- 6550 (655 A, B) Studies in Economic Development: Pacific Asia.** Three credits. Prerequisite: ECON 5470 or equivalent recommended. Analysis and evaluation of processes of economic development with focus on a specific area of the United States or of the world. Area covered varies.
- 6620 (662) Econometrics I.** Three credits. (Same as FIN 6620.) Prerequisite: ECON 4620 or equivalent. Focuses on the use of regression analysis in economics. Emphasis on using econometric software packages to investigate actual economic problems. A prerequisite for ECON 6630.
- 6630 (663) Econometrics II.** Three credits. Prerequisite: ECON 6620 or permission of instructor. Covers more advanced topics in econometrics, including recent model adequacy tests, Box-Jenkins time series analysis, dynamic modeling, systems of equations, discrete and limited dependent variable models, pooled regression. Emphasizes practical applications in various computing environments.
- 6640 (664) Thesis Research.** One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.
- 6660/ 7660 History of Economic Thought.** Three credits. Prerequisite: Graduate status. The evolution of economic thought from Aristotle to John Maynard Keynes as shaped by economic, social, political, and intellectual forces.
- 6730 (673) Seminar on Financial Institutions.** Three credits. (Same as FIN 6730.) Focus on the common and distinctive aspects of the provision of financial services and the management of risk associated with those services. Roles, characteristics, and operation of financial institutions, constraints that these institutions face in meeting that objective, regulatory environment within which they operate, risks that they face and the management of those risks, evolution experienced during the 1980s and 1990s, and the probable course of change in the years ahead.
- 7110 (711 A,B) Macroeconomics II.** Three credits. Economic growth and dynamic models; models of consumption and investment behavior. Monetary and fiscal policy issues. Alternative modeling approaches: macro-econometric models vs. calibrated simulation models.

- 7120 (712A) Microeconomics II.** Three credits. Prerequisites: ECON 5660, 6120, and 6620 or approved equivalents. Selected topics in microeconomics.
- 7121 (712B) Seminar in Applied Microeconomic Theory.** Three credits. Prerequisite: ECON 6120. Advanced methods used in practical applications of economics. Topics include index numbers and productivity analysis; indicators and allocational effects of price distortions; multi-market partial equilibrium and computable general equilibrium models; construction, simulation, and interpretation of multi-sectoral growth models.
- 7250 Methods of Outcome Assessment.** Three credits. Prerequisites: ECON 7120 and 7630. Deals with outcomes assessment of the educational process. Covers techniques to rank educational institutions, methods to assess the effectiveness of educational programs, ways to evaluate individual courses or instructors, and methods to assess student learning. Key quantitative tools that are used in outcomes assessment, including data envelope analysis, stochastic frontier models, and hierarchical linear models. Also considers the political and incentive problems that typically arise in implementing assessment methods in practice.
- 7500 Economics Workshop.** One credit. Students present material related to their dissertation proposal or ongoing dissertation research to peers and the graduate faculty in a formal workshop setting. Credit is awarded after a student completes **two** separate workshop presentations that are judged satisfactory by the attending graduate faculty.
- 7550 Quantitative Policy Analysis in International Economics.** Three credits. Prerequisites: ECON 6530, 7120, and 7630. Applications-oriented course emphasizing quantitative tools to analyze policy issues related to international trade, exchange rates, sectoral resource allocation, and growth. Topics include an extended introduction to trade policy analysis using a general equilibrium modeling framework. Practical aspects of general equilibrium modeling emphasized and applied to a particular issue of interest, such as the impact of trade liberalization on labor markets and growth or the impact of trade and exchange rate distortions on resource allocation and growth.
- 7600 (760) Instructional Development and Practice in Economics.** Three credits. Workshop atmosphere where students learn and practice presenting key economic concepts, using new technology in the classroom (including remote link technology), organizing and structuring courses and individual classes, using assessment tools effectively, and avoiding dealing with conflict in the classroom. Offers preparation to teach hands-on undergraduate classes in economics.
- 7610 Economic Internship.** Three credits. Prerequisites: FOED 7520 and SPSE 7550. Supervised teaching of undergraduate economics courses.
- 7630 Seminar in Applied Econometrics.** Three credits. Prerequisites: ECON 6630. Third course in the econometrics sequence. Advanced econometric methods and their use in the analysis of empirical problems in macroeconomics and microeconomics. Includes applications of recent panel data estimators, qualitative and limited dependent variable models, structural time series models, and the simulation of multiple-equation models. Emphasis on case studies that allow students to integrate knowledge from economic theory and econometrics.
- 7640 (764) Dissertation Research.** One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled,

student should register for at least one credit hour of doctoral research each semester until completion. S/U grading.

- 7710 Topics in Advanced Financial Economics.** Three credits. (Same as FIN 7710.) Prerequisites: ECON/FIN 7460, ECON 7121, and ECON 7630. Major topics in financial economics including applied interest rate analysis, choice under uncertainty, the capital asset pricing model, consumption-based asset pricing model, factor models, the efficient markets hypothesis, and models of time-varying market volatility with an emphasis on empirical applications of theoretical concepts using Microsoft Excel. Cultivation of practical programming skills is designed to complement application of economic theory to financial markets.
- 7900 Research Seminar.** Three credits. Students practice writing academic papers, critiques, and monographs in economics and finance, with some emphasis on developing a viable dissertation proposal. Includes identifying a topic, delineating its scope, fitting it into the literature, finding data, choosing an appropriate methodology, presenting the results and conclusions, and comparing them to the existing literature; pitfalls to avoid when working on dissertations and academic papers.

Courses in Finance [FIN]

- 5310 (531) Public Finance II.** Three credits. (Same as ECON 5310.) Prerequisites: ECON 2410 and 2420. Current issues in taxation, theory of income taxation, consumption taxes, property and wealth taxes. Advanced treatment of tax incidence, tax efficiency, income distribution, fiscal federalism, and state and local budget issues. Students are required to complete a term project resulting in a paper available for peer review and a class presentation.
- 5360 (536) Management of Financial Institutions.** Three credits. Prerequisite: FIN 3210 or equivalent or consent of instructor. Application of principles of institution management with a focus on operations, policy-making, asset, liability, and capital management of commercial banks and non-bank financial institutions.
- 5390 (539) Employee Benefits.** Three credits. (Same as ECON 5390.) Includes descriptive review and taxation, legislative, and administrative dimensions of the major components of employee benefit plans such as retirement systems, deferred compensation plans, health insurance, death benefits, disability benefits, paid and unpaid time off. Technical analysis and problem solving emphasized to develop applied skills. Social insurance and international benefits integrated.
- 5430 (543) Real Property Valuation.** Three credits. Prerequisite: FIN 2450 or consent of instructor; FIN 3010 strongly recommended. Theory and methods of real property valuation. Qualitative and quantitative analysis incorporated to appraise residential and income-producing properties. Comparable sales, cost-depreciation, and income capitalization analysis emphasized.
- 5590 (559) Problems in Real Estate.** Three credits. Current controversial conditions in the field of real estate with concentration on major problems and policies in managing real estate and other related resources.
- 5710 (571) Insurance in Estate Planning.** Three credits. Prerequisite: FIN 3610 or permission of instructor. Insurance as it may relate to estate planning examined in detail. Focus on estate planning principles including the problems of estate liquidity, taxation, governmental regulation, and costs involved in han-

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ding estates. Also included are ownership provisions and beneficiary designations, settlement options, and trusts.

5730 (573) Insurance Company Operations. Three credits. Prerequisite: FIN 3610 or permission of instructor. Insurance marketing, underwriting, reinsurance, rate making, claims adjusting, loss control activities, and other functions and activities.

5750 (575) Risk Management. Three credits. Prerequisite: FIN 3610 or permission of instructor. Analysis of major sources of liability loss exposures and the insurance coverages designed to meet those exposures. Noninsurance techniques such as loss control and risk transfer are also discussed.

5790 (579) Problems in Insurance. Three credits. Prerequisite: FIN 3610 or permission of instructor. Application of various insurance coverages to fulfillment of personal, business, and social needs. Special problems are chosen or assigned in areas of the student's interest in joint consultation between student and instructor.

5890 (589) Internship in Finance. Three credits. Prerequisite: Graduate status and recommendation of advisor. Supervised work experience in cooperating business firms or government agencies together with specialized academic study relating to the work experience.

5990 (599) Problems in Finance. Three credits. Chosen in joint consultation between student and instructor.

6000 (600) Survey of Financial Management. Three credits. Principles and tools of financial management including time value of money, security valuation, funds acquisition and capital budgeting, cost of capital, and international environment. **May not be used for elective credit in graduate business degree programs.**

6430 (643) Seminar on Public Finance. Three credits. (Same as ECON 6430.) Examines the role of government in the allocation and distribution of society's resources. Topics include theories of government sector growth, public and quasi-public goods, externalities and agency theory, transitivity and completeness of voting preferences, income redistribution and economic justice, social insurance, health care programs, tax shifting and incidence analysis, efficiency and equity in taxation, and efficiency and redistributive aspects of deficit financing. Topics may involve case studies such as budget formulation, environmental policies, payroll taxes, and alternative tax structures.

6440 (644) Readings in Finance. One to three credits. Independent readings-based study of a particular topic in finance selected by the student and approved by the instructor. Provides an opportunity to study special areas of interest for which regular courses are not offered.

6450 (645) Seminar on Monetary Policy. Three credits. (Same as ECON 6450.) Prerequisite: ECON 3210 or equivalent recommended. Objectives and limitations of monetary policy, alternative monetary theories underlying policy decisions and the controversy among theories, transmission channels of monetary policy, alternative strategies used to achieve the objectives of monetary policy, practical considerations in the execution of monetary policy, global linkages and monetary policy, and the effects and consequences of policy decision on economic activity and business decisions.

6460/ 7460 (646) Seminar on Financial Markets. Three credits. (Same as ECON 6460/7460.) Prerequisite: ECON 3210 or

equivalent. Credit flows within the U.S. and the global economies, the economic and financial forces influencing the general level of interest rates and the relationship among interest rates, the characteristics of key short- and long-term financial assets, new financial instruments, derivative instruments, global financing linkages, global linkages among financial instruments and among national economies, and interest rate risk, including the measurement and means of protection.

6550 (655) Real Estate Investment. Three credits. Prerequisites: FIN 2450 and 3010. Development of a framework for making real estate investment decisions and for analyzing real estate investment alternatives.

6620 (662) Econometrics I. Three credits. (Same as ECON 6620.) Prerequisite: ECON 4620 or equivalent. Focuses on the use of regression analysis in economics. Emphasis on using econometric software packages to investigate actual economic problems. A prerequisite for ECON 6630.

6710 (671) Financial Analysis. Three credits. Prerequisite: FIN 3010 or 6000. Theory of corporate finance with applications. Techniques and problems for maximizing wealth through the application of discounted cash flow analysis. Emphasis on risk, capital budgeting, and capital structure.

6720 (672) Cases in Financial Management. Three credits. Prerequisite: FIN 6710. Applications-oriented approach to managerial problem-solving. Topics may include working capital management, capital budgeting, cost of capital estimation, lease/purchase decisions, bond refunding, and international issues.

6730 (673) Seminar on Financial Institutions. Three credits. (Same as ECON 6730.) Focus on the common and the distinctive aspects of the provision of financial services and the management of risk associated with those services. Roles, characteristics, and operation of financial institutions, constraints that these institutions face in meeting that objective, regulatory environment within which they operate, risks they face and the management of those risks, evolution experienced during the 1980s and 1990s, and the probable course of change in the years ahead.

6740 (674) Security Analysis. Three credits. Prerequisite: FIN 3810 or consent of instructor. Interpretation of financial statements, valuation and selection of securities, security risk, legal and regulatory issues, and agency problems.

6860 (686) International Financial Management. Three credits. Prerequisite: FIN 3010 or 6000. International capital markets, exchange rate exposure, risk management, and other multinational finance issues. Essential not only for United States exporters, but also for those facing competition from abroad.

7710 Topics in Advanced Financial Economics. Three credits. (Same as ECON 7710.) Prerequisites: ECON/FIN 7460, ECON 7121, and ECON 7630. Major topics in financial economics including applied interest rate analysis, choice under uncertainty, the capital asset pricing model, consumption-based asset pricing model, factor models, the efficient markets hypothesis, and models of time-varying market volatility with an emphasis on empirical applications of theoretical concepts using Microsoft Excel. Cultivation of practical programming skills is designed to complement application of economic theory to financial markets.