

# Patricia L. Pacey, Ph.D.

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## Education

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### University of Florida

Ph.D. in Economics, with honors (*Labor Economics/Industrial Organization/Statistics/Taxation*)  
1976

### University of Florida

Bachelor of Arts in Mathematics, *cum laude*  
1971

## Professional Activities

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### Pacey Economics, Inc., Economic and Business Consulting Firm, President

- Provide economic evaluation of loss in personal injury and wrongful death matters, integrating issues of occupational mobility, labor force participation, age-earnings profiles, disabled workers in the labor market, etc. Incorporate the value of homemaker services given private and public surveys and specific family circumstances of time contributions to such a household. Specify costs for additional medical care or services required of an injured party.
- Provide analysis of employment termination matters, including statistical analysis of various employment practices as well as economic evaluation of damages. Prepare bar charts, graphs and other demonstrative tools. Develop computer macro models for more efficient analysis of multi-client claims.
- Prepare academic studies and reports for the Colorado Public Employee Retirement Association (PERA). Studies include the economic and fiscal impacts of PERA beneficiary payments on the Colorado economy, quantifying the impacts into output, value-added, labor income, and employment by various regions of the state. Additional analysis on the specific fiscal impacts from income, sales and property taxes are ascertained by analyzing personal consumption, housing and tax data. Another study found a net positive impact on Colorado by contributing to PERA rather than having the public employees in the Social Security system over the past 25 years. Other projects compare the performance of a defined contribution (DC) plan *vis-à-vis* a defined benefit (DB) plan to evaluate the funding (or underfunding) of different pension plans, assess state and local public pension plans in Colorado to identify the opportunity for economies of scale or potential cost efficiencies through other management avenues.
- Conducts research projects, many on behalf of the State of Colorado, but also for specific industries or markets. Contracts awarded include the development of a comprehensive Amendment 23 model to compare different funding and spending scenarios for legislative needs, revenue forecasting and other econometric forecasting models, evaluation of the economic performance of various government agencies, etc. Other projects have involved determining appropriate products for sampling techniques, collecting price data by school district in Colorado as well as incorporating shopping pattern habits and determining and computing various statistical measures to confirm the validity of the study.
- Using relevant macroeconomic statistics (e.g., population, tourism, etc.) and industry specific data to review and present analyses regarding the changes in real estate values due to environmental contamination, among other issues, and many projects involving the analysis of large data sets utilizing econometric techniques.

### **Professional Activities Continued**

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- Prepare evaluations of lost profits and/or other economic damages as they relate to specific business interruptions (breach of contract, defective product, etc.). Research the economic indicators relevant to the specific industry business life cycle, and the economic environment to develop economic foundation and data for the basis of assumptions utilized in an analysis.
- Examine antitrust matters involved in identifying relevant markets, monopoly power and issues of corporate conduct as they relate to market performance. Develop necessary economic foundation and statistical support for assumptions regarding market performance (revenue levels, variable costs, profit margins, etc.) Integrate assumptions to determine economic damages and often team with national accounting firms to combine economic and accounting expertise.
- Other projects include valuing acquisitions and diversification as strategy. Examine the critical variables employed in financial techniques utilized in investment decisions. Utilize econometric modeling in the evaluation of optimal dividend payout policies and the identification of the underlying criteria associated with stock price variation. Provide reviews of academic literature and synthesize/translate the implications for business use. Assess economic impact of specific events on local areas. Utilize economic principles to develop pricing policies and forecast market conditions.

More information and background on Pacey Economics, Inc. can be found on the company website ([www.paceyecon.com](http://www.paceyecon.com)).

### **Prior Work Experience**

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**University of Colorado, College of Business and Administration**, Adjunct Professor, 1986 through 1992.

- Focused on teaching in the areas of managerial economics and finance at both the undergraduate and graduate levels, plus Business and Law courses both at the Boulder and Denver campuses. Continued research activities with colleagues and was a member of the graduate faculty.

**University of Colorado, College of Business and Administration and Graduate School of Business Administration**, Director of Research Center Programs, May 1985 to December 1985.

- Responsibilities included conducting feasibility of new University/Industry program. Identified projects for joint faculty and business research endeavors.

**University of Colorado System**, Economics Professor, August 1977-May 1985.

- Teaching responsibilities included microeconomic theory, statistics, econometrics, managerial economics and finance, antitrust and regulated industries economics. Research was focused primarily in demand and marketing analyses in telecommunications, labor and sports industries. As a faculty member, taught initially on the Colorado Springs campus and then the Boulder campus.

**Congressional Budget Office, Washington, D.C.**, Associate Analyst and Adjunct Professor of Economics, **George Mason University**, 1976-1977.

- Responsibilities included providing cost estimates for bills introduced in the U.S. Congress in areas related to manpower training, education, and social security. This position required a substantial degree of liaison work with Congressional committee members and their staffs, as well as the ability to interpret legislation into cost estimates. Also, maintained teaching responsibilities as adjunct professor.

**University of Florida J. Hillis Miller Health Center**, Office of the Vice President, Assistant for Planning and Budget, Gainesville, Florida, 1973-1976.

- Directed the pilot study for the American Association of Medical College cost study. Provided statistical and research analyses to be used as the basis for the Health Center Legislative budget. Assisted in developing and compiling the budgets for the Colleges of Medicine, Dentistry, Pharmacy, Nursing, and Physical Therapy (now known as the college for Public Health and Health Professions); subsequently, the Health Center now also includes the College of Veterinary Medicine.

### Journal Articles and Publications

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- “The Political Economy of Deregulation: The Case of Intrastate Long Distance,” with D. Kaserman and J. Mayo, *Journal of Regulatory Economics*, March 1993, Vol. 5, No. 1, 49-63.
- “Discounting to Present Value: The Economist’s View,” *The Colorado Lawyer*, June 1991, Vol. 20, No. 6, 1211-1217.
- “Televising College Football: The Complementarity Between Attendance and Viewing,” with W. Kaempfer, *Social Science Quarterly*, March 1986.
- “A Note on Purchased Power Adjustment Clauses,” with D. Kaserman and R. Blair, *Journal of Business*, October 1985, Vol. 58, No. 4, 409-417.
- “Cable Television in a Less Regulated Market,” *Journal of Industrial Economics*, September 1985, Vol. 34, 81-92.
- “Measures of Economic Loss in the Wrongful Death of a Child,” *The Colorado Lawyer*, March 1985, Vol. 3, 392, 400-402.
- “College Football Television: Where are They Going?,” with E. Wickham, *Economic Inquiry*, January 1985, 93-113.
- “Local Measured Telephone Service in the USA,” with L. Singell, Jr., *Telecommunications Policy*, September 1984, 249-255.
- “The Distribution of Athletic Scholarships Among Women in Intercollegiate Sports,” with J. Coakley, in *Sport and the Sociological Imagination*, ed. by Nancy Pheberger and Peter Donnelly, Champaign, IL, Human Kinetics, June 1984.
- “Measures of Economic Loss in Death of a Child,” *Trial Talk*, April 1984, 28-30.
- “Long Distance Demand: A Point-To-Point Model,” *Southern Economics Journal*, April 1983, 1094-1107.
- “Impact of Deregulation on Point-To-Point Demand in the USA,” with S. Berg, *Telecommunications Policy*, December 1982, 308-314.
- “The Courts and College Football: New Playing Rules Off the Field?,” *American Journal of Economics and Sociology*, July 1982, 257-267.
- “Equal Opportunity for Women in Intercollegiate Sports: Influences on Participation,” *American Journal of Economics and Sociology*, July 1982, 257-267.
- “How Female Athletes Perceive Coaches,” with J. Coakley, *Journal of Physical Education and Recreation*, Vol. 53, No. 2, February 1982, 54-56.
- “Cost Studies of the J. Hillis Miller Health Center,” pilot study, published and distributed to the Board of Regents and Department of Administration (Florida), presented to National Institute of Health Representative, Summer 1974.
- “Projections of Population, Employment and Income, Selected Florida Counties for 1975, 1980, 1990, 2000, published and distributed to selected state agencies by Bureau of Economic and Business Research and the Department of Water Resources, Fall 1973.
- “Age Characteristics of Florida’s Population, 1970 to 1980,” published in *Population Studies*, March 1973.
- “Estimating Personal Income,” published in *Business and Economic Dimensions*, July-August 1972.

## Consulting Reports (Public)

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Consulting projects conducted for State agencies are described below. A copy of these reports are typically available on the agencies' websites. In addition, consulting services have been provided to various athletic departments across the country and a statistical analysis was conducted for the Institute for the Advancement of the American Legal System at the University of Denver.

**Various PERA Projects, 2012-2013 on behalf of Colorado PERA.** *In December 2012, "Why Moving to Social Security is a Bad Idea for Coloradans" focused on the difference between contributions to PERA v. Social Security. Colorado employees and employers have consistently contributed more into the Social Security system than Colorado retirees have received in benefits while PERA investment income has more than covered benefit payments and administrative expenses over the past 25 years. In February 2013, "An Apples to Apples Comparison of PERA and Private Sector Retirement Plans" revealed that for the same retirement contributions made by private sector employees and employers, PERA provides a more efficient return (i.e., more benefits for the same cost). In August 2013, "PERA Pension Payments – Fiscal Impacts on State Income Tax, Sales Tax, and Property Taxes" revealed the total fiscal impact from Colorado PERA payments to retirees is nearly \$300 million. Our most recent study in November 2013 reviews potential cost savings to the state of Colorado through consolidation of municipal pension plans.*

**"The Declining Enrollment Study: A Comprehensive Review of Funding for Colorado Public School Education," March 2010 on behalf of Colorado Department of Education.** *This research study explored the impact of declining enrollments on Colorado school districts' funding and expenditures as well as student performance as measured by CSAP scores. Analyses associated with the public school funding formula, necessary education costs, education choice, and the characteristics of students and districts were performed. In addition, topics including school district consolidation and the cost of providing an education meeting state and federal requirements were addressed. A comprehensive report was provided plus a shorter version titled "Highlights & Recommendations of The Declining Enrollment Study" was also issued. The key findings from the study were presented to the Colorado Senate and House Education Committees as well as the Colorado State Board of Education.*

**"Colorado PERA's Economic & Fiscal Impacts," August 2009 and November 2011 on behalf of Colorado PERA.** *This research study measured the economic and fiscal impacts of the Colorado Public Employees' Retirement Association (PERA) benefit payments to Colorado recipients and provides a description of PERA members (active and benefit recipients). PERA is the retirement plan for over 400 government agencies and public entities within the State of Colorado with over 190,000 active members and almost 79,000 retirees. The association provides benefit payments of \$2.45 billion annually to Colorado residents (as of March 2009). The research included analyses at the state, regional, and county levels including the use of an input-output model to estimate the economic and fiscal impacts. A presentation of the study was given to the PERA Board of Trustees. An updated study was performed in November 2011 showing that there are over 200,000 active members and over 90,000 retirees. The association provides benefit payments of \$3.03 billion annually to Colorado residents (as of July 2011).*

**"Response to Key Findings Outlined in Deferred Retirement Compensation for K-12 Employees: Understanding the Need for Pension Reform," Spring 2009 on behalf of Colorado PERA.** *This paper was a response to the issue paper entitled "Deferred Retirement Compensation for K-12 Employees: Understanding the Need for Pension Reform" authored by Michael Mannino, Ph.D. dated December 2008.*

### **Consulting Reports (Public) continued**

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**“Commission to Strengthen & Secure PERA Final Report to the State Treasurer”**, September 2005 on behalf of the *State of Colorado Treasurers Office*. The Colorado State Treasurer formed the Commission to review the financial health of the Colorado Public Employee Retirement Association (PERA) which provides pension benefits to state and local public employees. The Commission, comprised of business executives, public-sector leaders and academic experts, took testimony from PERA, legal counsel, and pension professionals. The report explores the causes of PERA’s present financial situation and identifies solutions to restore fiscal stability to the state’s pension program and to strengthen its governance structure to prevent financial problems in the future.

**“Colorado School District Cost of Living Study”**, December 2001, January 2004, and December 2005 on behalf of the *Colorado Legislative Council*. This study was utilized by the State of Colorado to determine school funding from the State to the 178 school districts. The cost of a standard basket of goods was determined in each school district to determine the relative cost of living for each school district to be incorporated into the public school funding formula.

**Review for Environmental Protection Agency on the report entitled, “Labor Costs for National Drinking Water Rules,” March 2003.**

**“Colorado Lottery Forecast Analysis”**, September 2001, on behalf of the *Office of the State Auditor*. This project included an analysis and review of the statistical procedures currently used in the Colorado Lottery’s revenue forecasting methods as well as the development of an alternative econometric forecasting model. Findings and recommendations were discussed in a report and presented to the *Legislative Audit Committee*.

**“Amendment 23 Economic Modeling For Decision Makers”**, February 2001, on behalf of the *Office of the State Auditor*. This consulting project involved an analysis of the impact of Amendment 23 to the Colorado Constitution, which created an education fund from a portion of tax revenues and mandated minimum spending levels the state legislature must provide for public education in Colorado. The end result of the project was the development of a comprehensive model, which allows legislators to evaluate the impact of future funding and spending scenarios on the longevity of the fund. This project required working closely with members of various government departments including *Legislative Council Staff, Office of the State Planning and Budgeting, Colorado Department of Education, Department of Treasury*, etc. and findings were presented to the *Legislative Audit Committee* and the *Joint Budget Committee*.

## Performance Audits

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**“Regional Transportation District Performance Audit”**, August 2006, on behalf of the *Office of the State Auditor*. The Regional Transportation District (RTD) is a political subdivision of the State that provides a transportation network for an eight-county Denver metropolitan region. The primary objective of the audit was to evaluate RTD’s fare-setting and route efficiency practices. Audit work included interviews with key personnel, review and analysis of RTD documents and databases, and analysis of other transportation districts’ programs. The report for this audit included background on RTD, audit findings, and recommendations for change. The findings were orally presented before the *Legislative Audit Committee*, a committee comprised of four state senators and four state representatives.

The following performance audits were conducted on behalf of the *Office of the State Auditor* for programs that are funded by monies received by the State of Colorado through litigation with tobacco companies. The audits were conducted to review the program and determine if it was effectively and efficiently meeting its stated goals. Audit work included gathering information through document review, interviews with program managers and fiscal staff, analysis of data, and on-site visits with grantees. Information was gathered regarding the overall administration of the programs, the application process, budgeting issues, and reporting requirements. A report was issued for each audit that included a review of the program, audit findings, and recommendations for change. Each report was orally presented before the *Legislative Audit Committee*.

- “Read to Achieve Grant Program Performance Audit”, July 2006. The Read to Achieve Grant Program funds intensive reading programs for 2nd and 3rd grade students and students between 3rd and 4th grade whose literacy and reading comprehension skills are below levels established by the State Board of Education. The program is managed by the Colorado Department of Education while the grantees include Colorado public elementary schools.
- “Nurse Home Visitor Program Performance Audit”, May 2006 and August 2002. The Nurse Home Visitor Program offers home visits by specially trained nurses to first-time, low-income mothers during pregnancy and through the child’s second birthday. The program is managed by the Colorado Department of Public Health and Environment while county health departments, nursing services, and other agencies provide the direct services to mother and child. As part of the program, the grantees bill Medicaid, administered by the Department of Health Care Policy and Financing. The Office of the State Auditor contracted with Pacey Economics Group to perform the initial audit in 2002 and then the follow-up audit in 2005/2006.
- “Tobacco Education, Prevention, and Cessation Grant Program Performance Audit”, December 2004. The Tobacco Education, Prevention, and Cessation Grant Program provides grants to community-based and statewide tobacco education programs to promote a reduction in the use of tobacco and a reduction in exposure to second-hand smoke. The program is managed by the Colorado Department of Public Health and Environment. The grantees included county health departments/nursing services, statewide initiatives such as Quitline/QuitNet and media advertisements, and youth coalitions/community partnerships.
- “Comprehensive Primary and Preventive Care Grant Program Performance Audit”, June 2003. The Comprehensive Primary and Preventive Care Grant Program provides grants to health care providers in order to expand primary and preventive health care services to Colorado’s low income, uninsured residents. The program is managed by the Colorado Department of Health Care Policy and Financing while the grantees include community/family health clinics that specialize in providing medical and dental care to medically indigent individuals.

### Contracts and Consulting Reports (Private)

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Involved in contract and grant activity while a full-time or adjunct university professor and consulting projects for business clients. Consulting reports for business clients are generally confidential and are, therefore, not publicly available. Former clients include Florida Cable Television Association (FCTA), U.S. West, College Football Association (CFA), Mobil, Wendhi, ETTA, Idaho Cattle Producer's Association, among others.

**“Dividend Payout and Stock Prices Analysis”** consultant for U.S. West, spring 1995.

**“Gender Participation Analysis”** consultant for College Football Association, fall 1994.

**“Valuing an Acquisition”** and **“Diversification as Strategy,”** co-consultant for U.S. West, Strategic Marketing Division, summer 1988.

**“The Economic Impact of College Football on the Local University Community,”** studies conducted for member schools in the College Football Association (CFA), 1988 - present.

**“Risk and Return Analysis,”** co-consultant for U.S. West, Strategic Marketing Division, Winter 1986 - 1987.

**“Review of the Financial Services Industry,”** co-consultant for U.S. West, Strategic Marketing Division, 1986.

**“Study of Interstate Telecommunications Service in Colorado,”** with R. W. Beck and Associates for the Colorado Public Utility Company, Fall 1985.

**“An Analysis of Television, Money and Attendance in College Football,”** for the College Football Association, Summer 1985.

**“Environmental Assessment – General Power Marketing Criteria and Allocation Criteria for Salt Lake City Area,”** R. W. Beck and Associates, Fall 1984.

**“Economic Appraisal and Financial Evaluation of a College Football Television Package,”** for the College Football Association, Summer 1983 and Summer 1981.

**“Economic Criteria in Utility Rate-Making,”** for Shell Oil Company, Winter-Spring 1983.

**“Econometric Analysis of the Televising of College Football Games and their Impact on In-game Attendance,”** for the College Football Association, April 1982.

**“Micro Modeling and Analysis for Long Distance Users of OCCs,”** GTE Satellite Corporation (GSAT), March 1982.

**“Benefits from a Telecommunications System in Alaskan Villages,”** with G. Anderson and E. Loehman, SRI, for Alaskom, January 1981.

**“Factors Affecting the Participation of Females in Intercollegiate Athletics,”** grant from National Collegiate Athletic Association, May 1982.

**“Impact Fees and Rate Structures,”** position papers for the Public Utility Research Center at the University of Florida, 1978-79.

### Contracts and Consulting Reports (Private) continued

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**Council on Research and Creative Works (CRCW)**, University of Colorado, for purchase power adjustments, grant, Spring 1981.

**Public Utility Research Center**, University of Florida, for Telecommunications project, grant, January 1980.

**National Collegiate Athletic Association (NCAA)**, for study on female participation in sports, grant, Summer 1979.

**Council on Research and Creative Works (CRCW)**, University of Colorado, for telecommunications project, grant, Spring 1979.

### Presentations and/or Conference Participation

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Regular attendee and participant in various academic and professional associations such as American Economic Association, Western Economics Association, Southern Economics Association, National Employment Lawyers Association, and National Association of Forensic Economics. In addition, attendee and participant at various programs and/or seminars, 1979 – present, relating to various topics including telecommunications, other regulated industries, applied economics and finance matters, AICPA - CPE, Sterns-Stewart free cash flow, antitrust issues, economic development and lost profits, and personal injury, death or employment matters (for various organizations including Colorado Trial Lawyers Association, Continuing Legal Education in Colorado, Inc., Houston Bar Association, Wyoming Trial Lawyers Association, Colorado Society of Certified Public Accountants, and International Association of Defense Counsel). More recently, a participant at the *2009 Civil Rules Summit: From Anecdotes to Action, Institute for the Advancement of the American Legal System, University of Denver. A comprehensive, but not all inclusive, list of presentations is provided below.*

**“Do I Need an Expert? What Expert to Use?”** Colorado Bar Association 2006 Annual Employment Law Conference, October 2006.

**Expert Witness in mock trial, Consumer Attorneys Association of Los Angeles, 23rd Annual Las Vegas Convention, September 2005.**

**“Evaluating Economic Losses in Employment Matters,”** National Employment Lawyers Association (NELA) Conference, June 2003.

**“The ‘Real World’ of Business and Economics,”** presented to students at the Economics Institute, summer 2002.

**“What’s the Score? Evaluating Business Losses” and “Cross Examining the Plaintiff’s Economist In Personal Injury and Death Cases,”** Defense Research Institute, Las Vegas, March 2001.

**“Evaluating Economic Loss in a Wrongful Death Case,”** National Institute of Trial Advocacy, Advanced Trial Advocacy Program (NITA), participation in mock trial and breakout sessions, various times since 1987.

**“Evaluating Economic Loss in a Personal Injury Case,”** for the International Association of Defense Counsel (IADC) - Defense Counsel Trial Academy (DCTA), participate in presentation and supervise breakout groups, summers 1988 – 2003.



### **Presentations and/or Conference Participation continued**

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**“Economic Appraisal of Loss,”** How to Evaluate and Settle Personal Injury Claims in Colorado, sponsored by Professional Education Systems, Inc. (PESI) for Continuing Legal Education (CLE) credits, 1987-1992.

**Analysis of constant and current prices** associated with the Governor’s Task Force on Medical Malpractice, March 1988.

**“Lost Earning Capacity and the West Decision,”** panel discussion at ReEntry Vocational Service Conference, June 1985.

**“A Hedonic Explanation of the TV Nielsen Ratings for College Football,”** presented at the Western Economic Association, Seattle, July 1983.

**“The Switch to Measured Service: Some Observations,”** with L. Singell, Jr., presented to Mountain Bell, Rates and Tariffs Division, June 1983.

**“Economic Efficiency and Broadcast Rights,”** paper presented at Law and Amateur Sports, Indiana University, School of Law - Bloomington, February 1983.

**“The New Profile on Cable Television,”** presented at the American Public Policy and Management Society, October 1982.

**“Economic Costs and Incentives for Intercollegiate Female Athletes,”** presented at Southern Economic Association, Atlanta, November 1980.

### **Relevant University Teaching Experience**

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Teaching experience includes 16 plus years as either a full-time or adjunct professor at the University of Colorado on the campuses of Boulder, and Colorado Springs and in fall 2003 on the Denver campus. Courses taught were upper level courses for both the economics department and business school, including the Masters in Business Administration (MBA) program. A few of the courses and the subject matter covered during those courses are discussed below.

#### **Managerial Finance - University of Colorado, Boulder**

This course, taught primarily to MBA students at the business school, focused on fundamental concepts in financial management, including topics in long-term investment and financing decisions. More specifically, topics such as managerial actions to maximize shareholder wealth, alternative forms of business organization, securities and financial statements, discounted cash flow analysis, bond and stock valuation models, as well as risk and rates of return were covered. In addition, financial statements were analyzed including discussions regarding ratio analysis. Topics associated with long-term investment decisions, such as capital budgeting, cash flow estimation, and risk analysis, were also presented along with topics in long-term financing, such as balance sheet accounts and definitions, types and evaluation of common stock, debt instruments, and the cost of capital.

## **Relevant University Teaching Experience continued**

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### **Managerial Economics - University of Colorado, Boulder**

This course, also taught mainly to MBA students at the business school, focused more on the study of markets, in general. At the beginning of this course, fundamental economic topics such as supply and demand, optimizing behavior and basic estimation (regression) techniques were presented. In addition, concepts in production and cost, consumer behavior, and elasticity of demand are included. Principles of different types of markets, such as perfect competition, monopolies, and oligopolies, and the profit maximizing decisions associated with each type of market are covered. Real world applications of the theories (concepts) presented in this course are also discussed.

### **Law and Economics (formerly known as Business and Government) - University of Colorado, Denver (Fall 2003) and previously at University of Colorado, Boulder**

A review of microeconomic theory (i.e., the pricing and output decision-making process) is presented including fundamental concepts such as maximization, equilibrium, and efficiency as well as game theory, welfare economics and decision-making under uncertainty. Topics relevant to law include the economic theory of the legal process and the economic theory of various types of law including contract law and tort law, such as bargain theory, remedies as incentives, settlement bargaining, computing damages, etc. In addition, the economic theory of crime and punishment including crime in the United States and efficient punishment is explored.

## **Other Relevant Research and/or University Teaching Experience**

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Research and other teaching experience has been performed on the topics discussed below.

### **Labor Economics**

This field in economics focuses on the determination of wages and employment in the labor market and the resulting distribution of income among individuals and households. Topics include supply and demand of labor, determination of wages, hours of work and effort, unemployment, investment in human capital and age-earnings profile. In addition, the economic impact of collective bargaining, discrimination, and the type of market (e.g., perfectly competitive, monopoly, etc.) on pay are aspects of this field.

### **Mathematical Economics/Econometrics**

Mathematical Economics applies mathematical and statistical concepts to economics. These include multiplier effects, probabilities, elasticities, derivatives and partial derivatives, functions, maximization, minimization, integration, exponentiation, matrix and linear algebra, and input-output analysis. Econometrics utilizes modeling and computers to analyze data. Topics include analysis with cross-sectional, time series and panel data, various models (e.g., multiple regression, linear probability, logit, etc.), homoskedasticity versus heteroskedasticity, dummy variables and various estimation methods (e.g., ordinary least squares, instrumental variables, two-stage least squares, etc.)

### **Microeconomics**

Microeconomics is a branch of economics that explores the behavior of individual economic entities (such as consumers, firms, workers, and investors) as well as the markets that they comprise. Topics include supply and demand curves, market equilibrium, effects of government intervention, consumer behavior, income and substitution effects, surpluses, risk, and the cost of production. In addition, how firms maximize profit, analysis of markets (e.g., competitive, monopoly, monopsony, oligopoly), game theory and competitive strategy, and markets for factor inputs are included in microeconomics. Another field within economics is managerial economics which applies many of the same concepts as described above.

## Types of Litigation Work Performed

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A description of the different types of consulting projects and the major concepts in these projects are discussed below. It should be noted that this is not an exhaustive list, but rather examples of litigation work often performed.

### Personal Injury, Wrongful Death, and Employment Matters

These matters involve projecting components such as wages, fringe benefits, personal consumption and contribution of individuals to household chores. Oftentimes, the valuation of medical/life care expenses recommended by rehabilitation and medical care specialists is also included. In performing such an analysis, future productivity and inflationary trends in the economy as well as personal circumstances of the individual must be addressed.

### Business/Commercial Matters

Business/commercial matters typically involve measuring lost profits as a result of some kind of interruption. The interruption could stem from a number of different actions including, but not limited to, breach of contract, patent infringement, trade secret theft, fire, etc. These analyses oftentimes include incorporating business cycles, potential synergies, risk factors and the nature of the industry/ business. Computer models are often created to project future unimpaired and impaired gross revenues, expenses, profits, etc.

### Real Estate Valuation Matters

Regression and statistical techniques are utilized to analyze the diminution in value to residential property as a result of environmental contamination, such as a nearby landfill, treatment plant, or uranium mill, etc. as well as from waste and other by-products from industrial/manufacturing companies. Data are typically compiled from the county assessor's office or from realtor listing books, and then various statistics are generated on the data set to gather background information on structural characteristics such as age, square footage, number of rooms, lot size, etc. as well as neighborhood characteristics such as distance from central business district, parks, etc. The properties are also analyzed using hedonic pricing models which provide the implicit price of each characteristic including the impact of the environmental contamination.

## Professional Associations

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### Professional Association Memberships

- American Economic Association
- Western Economic Association
- Southern Economic Association
- National Association of Forensic Economists
- American College of Forensic Examiners – Diplomate
- American Association of University Women
- Beta Gamma Sigma, Honorary Business Fraternity

### Community/Academic Involvement – Past and Present

- Colorado Commission for Higher Education – Vice Chair
- Treasurer's Commission to Strengthen & Secure PERA
- Governor's Revenue Estimating Advisory Committee
- The Economics Institute – Board Member
- U.S. Chamber of Commerce
- Denver Area Business Economist
- Denver Chamber of Commerce
- University of Colorado – Boulder, Business Advisory Council
- Technical Advisory Committee on Non-Smoking and Health
- Referee and reviewer for various academic journals publishers