

REQUIREMENTS FOR GRADUATION WITH HONORS

IN THE

DEPARTMENT OF ECONOMICS AND BUSINESS

revised Spring 2005

Department Honors Coordinators

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INTRODUCTION

This document has been written to help you decide whether or not you wish to pursue an honors thesis as part of your undergraduate education.

Research is an important aspect of learning. Lafayette provides a variety of research experiences including a two-semester honors thesis project. The honors thesis provides students a unique educational experience unavailable elsewhere in the curriculum. An honors thesis allows students to design and carry out an independent scholarly investigation of an issue of personal interest.

The Department of Economics and Business encourages its majors to undertake an honors thesis. Completion of an honors thesis is tangible evidence of a student's intellectual curiosity, initiative, sense of responsibility, capacity for independent work, and academic ability. Students who demonstrate these qualities are highly sought by future employers and graduate institutions. Students who complete an honors thesis receive unique recognition at graduation and have a distinctive notation stamped on their academic transcript. In addition, this research may be published in refereed scholarly journals and/or presented by students at local and national scholarly meetings.

Although it is highly advisable that some work be undertaken during the junior year, majors formally begin the honors thesis process in the fall of their senior year by enrolling in Economics 495: Thesis. Economics 495 is the first course in a two-semester thesis sequence, Economics 495/496. Both are courses that satisfy elective credit for the degree. Successful completion of Econ 495/496 will result in receipt of an enhanced "W" consistent with the college curriculum requirement. Econ 495 counts as one of the five elective courses required for the major in Economics and Business. In order to enroll in the honors thesis sequence, the student must have the permission of a supervising faculty mentor, meet the minimum grade requirements set by the college (3.00 GPA overall and 3.20 in Economics and Business courses), and obtain the department head's signature on the registration card.

In the first semester of the honors process (Economics 495), the student defines a problem, researches the relevant literature on the subject, develops a hypothesis and proposes a methodology for conducting the research. The first semester culminates with a

formal written research proposal to the supervising faculty mentor. The student provides a brief defense of the proposal. The student must earn an "A" in Economics 495 in order to enroll in Economics 496. In the second semester, the student performs the analysis that was previously proposed, evaluates the results of the analysis, presents the results of the analysis in a written paper and defends the thesis before an honors thesis committee in a public presentation that is open to all Economics and Business Department faculty. If the student successfully completes the honors process, the Economics and Business Department will nominate the student for graduation with Honors in Economics and Business.

HOW TO BECOME INVOLVED IN AN HONORS THESIS

One of the best ways to begin the honors thesis process is to take an upper level course in the subject area that most interests you. During the course, approach the professor and discuss the possibility of an honors thesis on a subject of mutual interest. If the department does not offer an advanced course in the subject that interests you, approach the professor whose research or teaching interests most closely match your own. If that professor is not interested in your specific topic, he or she will suggest professors in the department who might be interested in your topic. Although it is not always necessary, it is usually best to have a general idea for a project in mind (some professors keep a list of five or six topics that would be suitable for an honors thesis). In all cases, students must work in the faculty mentor's general area of research activity or teaching interest and with the faculty mentor's permission.

Listed below are the faculty of the Department of Economics and Business and a brief description of their interests:

Susan Averett - Econometrics, Labor Economics, Economics of Race and Gender, Economic Issues, Demographic Economics

Howard Bodenhorn - Economic History, Law and Economics

Thomas Bruggink - Environmental Economics, Economics of Sports, Applied Microeconomics, Econometrics

Rosie Bukics - Accounting and Auditing Topics

Donald Chambers - Investment, Corporate Finance

James DeVault - Macroeconomics Issues, International Economics, Environmental Economics

Edward Gamber - Macroeconomics, Time Series Analysis

Sheila Handy - Accounting and Taxation

Jerry Heavey - Taxes and Local Government Issues, Managerial Economics, Russian and Irish Economies, Gambling, Other Applied

Economics topics

- Chris Ruebeck - Industrial Organization, Applied and Evolutionary Game Theory, Simulation Methods, Marketing, Technological Change, Econometrics
- Ute Schumacher - International Economics, Microeconomics
- Edmond Seifried - Finance, Bank Management, Macroeconomic Topics

Do not be afraid to approach the professor of your choice and express interest in doing an honors thesis; the economics and business faculty are eager to help students who wish to complete an honors thesis. The faculty members look upon student involvement in research programs as a mutually beneficial relationship, which strengthens the faculty members' own research and also has the important benefit of providing training to undergraduates. The professor will provide guidance and resources for the honors thesis; you will provide interest, hard work and enthusiasm.

The next page provides a list of the titles of previous honors thesis projects.

Samples of Previous
Honors Thesis Topics¹

2004-2005

MARK TORRES

"Turkey and the European Monetary Union: Turkish Welfare Assessment Based on Optimum Currency Area Theory"

Advisors:

EMILY FOGELBERG

"The European Union and Mercosur: A Strategic Partnership For Development Cooperation?"

Advisors: U. Schumacher, V. Langland

VERONICA HART

"The Role of Women in the Economy, Culture and Literature of Spain From Dictatorship to Democracy"

Advisors: H. Bodenhorn, D. Galarza-Sepulveda

CAREY CUNNINGHAM

"Would the United States Economy Benefit From Inflation-Targeting?"

Advisors:

SARAH SEGAL

"Does Price Discrimination Drive Tuition Increases?"

Advisor: T. Bruggink

CATIE DONLEY

"Why Some Pennsylvania Schools are Better Than Others"

Advisor: M. Crain

ISAAC ESSEKU

"Firm's Optimal Cash Holdings and Agency Costs"

Advisor: J. Heavey

SHREEDHAR SASIKUMAR

2003-2004

CHRISTINE BENDER

"Medicaid Benefits: Factors Influencing Take-Up and Use

¹Full copies of the above are available at Skillman Library

Among Easton, Pennsylvania's Indigent Population"

Advisors: S. Averett; D. Stifel; C. Gray

PAUL FISCHETTI

"Technical Analysis Applied to United States and Developing
Equity Markets: A Test of Market Efficiency"

Advisor:

DAVID WATTS

"Monetary vs. Fiscal Policy: A Study of Their Relative
Effects on U.S. GDP"

Advisors: E. Gamber; D. Stifel; B. Murphy

LISA LORAY

"Executive Compensation and 162(m): Can the Growth of CEO
Compensation be Curbed?"

Advisor: Rose Marie Bukics

CHRIS TURANO

"Economic Factors Leading to Industry Contraction: A Case
Study for Major League Baseball"

Advisors: T. Bruggink; J. DeVault; R. Weiner

DOUGLAS SCHIZ

"Location and Gate Revenue Model in the NFL"

Advisors: T. Bruggink; C. Ruebeck; L. Zulli

STACY ALBOHER

"Certified Forestry Products: An Exploratory Study"

Advisor: James DeVault

2002-2003

SHIVANI MALHOTRA

"Racial Wealth Inequality before Emancipation: Virginia in
1860"

Advisor: Howard Bodenhorn

CRYSTAL TAYLOR

"Pareto Efficient Exchange and Urban Development"

Advisor: Howard Bodenhorn

SUZANNE METZGER

"How to "Serve" Satisfaction: An Economic Analysis of
Tipping"

Advisor: Chris Ruebeck

JARROD POVEROMO
"Policy Measures in the Steel Industry and Their Effect"
Advisor: Chris Ruebeck

DAN WILLIAMS
"A Study of Possible European Discrimination in the
National Hockey League"
Advisor Thom Bruggink

KRISTEN GULLESTAD
"Idiosyncratic Risk and the Correlation of Individual
Stocks: An Empirical Study"
Advisor: Don Chambers

JENNIFER CONWAY
"Understanding Fundraising in Presidential Nominations:
Deciphering the Dollars
Advisor: Chris Ruebeck

JOSH GRUBMAN
"A Comparison of Relative Abilities of Multiple Regression
Analysis and Artificial Neural Networks to Predict House
Price in a Hedonic Model"
Advisor: Thom Bruggink

CHRIS REICH
"The Effects of U.D. News and World Annual College Report
Ranking on University Admissions, Decisions, Pricing
Policies and Allocation of Resources"
Advisor: Thom Bruggink

GREG STASZOWSKI
"Assessing the Efficiency of the Eurodollar Futures
Contract Market"
Advisor: Don Chambers

SHANE MOHR
"Insider Trading: Relevant SEC Rules and Regulations"
Advisor: Philip Shively

2001-2002

SCOTT WYNNE
"The Relationship Between Standardized Eight-Grade Math
Assessment Scores and the Per-Pupil Expenditures of the School

Districts of New York State"
Advisors: S. Handy; H. Hochman

ALSION PURCELL
"The Economic Determinants of Teenage Abortion"
Advisor: S. Averett

CHARLES E. DEUTSCH
"Monetary Policy and Asset Prices: Would Monitoring Asset
Prices Increase the Effectiveness of Policy Conduct?"
Advisors: E. Gamber; J. DeVault

MICHAEL LEVEY
"An Econometric Model for Predicting the Future Expansions and
Contractions of U.S. Airline Hubs"
Advisor: T. Bruggink

MEREITH SABOSIK
"Modern Challenges To Antitrust Laws"
Advisors: C. Ruebeck; J. Lennertz

TSIMAFEI MAROZ
"Impact of Codetermination on Productive Efficiency and Factor
of Production Strategies of German Companies"
Advisors: U. Schumacher; G. Hutchinson

JUSTIN MONTEFORET
"Exposure Versus Production: Paying Employees Their True Worth
A Case Study With Professional Baseball"
Advisor: T. Bruggink

LINDSAY CARIFI
"Markowitz Model: Finding the Efficient Frontier Using the
Current Stock Market"
Advisors: S. Handy; P. Shively

PETER CARLSON
"The Impact of Recent Tax Changes on the Proportion of Self-
Employed, Potential Labor Supply and Their Effect on
Macroeconomic Growth"
Advisor: H. Hochman; C. Wai Liew

SAAD RASOOL
"An Alternative Evaluation Tool for Assessing Corporate
Financial Performance"
Advisors: R. Bukics; D. Chambers

2000-2001

COLIN ROOSMA

"Major League Baseball Attendance: The Demand for Our National Pastime"

Advisor: T. Bruggink

KENDA ROBERTS

"Analyzing Technology Risk in a Cross-Border Telecommunications Project"

Advisors: G. Hutchinson; D. Veshosky

ALAN SKY

"Foreign Direct Investment in Russia: Case Studies of Success and Failure"

Advisor: J. Heavey

LISA KENDALL

"Female Mexican Immigrants: Are They Discriminated Against in the U.S. Labor Market"

Advisor: S. Averett

ANDY BATCHELOR

"U.S. Wages in a Globalized Economy"

Advisors: J. DeVault; S. Averett

FRANCOIS MARCOUX-MERCIER

"An International Trade Perspective on the change in Welfare Resulting from the Polish Integration to the European Union"

Advisors: U. Schumacher; G. Hutchinson

GINA GALATI

"A Test on Market Efficiency: How Dividends Affect Stock Prices"

Advisors: R. Bukics, D. Chambers, Q. Lu

LESLIE DOYLE

"Women in Mexican Maquiladoras: The Struggle for Voice"

Advisor: M. Beckman

SARAH BELLOWS

"Measuring Productivity in the Labor Market: The Impact of the Free Agent Year on Major League Baseball Player Performance"

Advisor: T. Bruggink

RENEE REEDY

"The contribution of Government Inefficiency to the Asia Financial Crisis of 1997"

Advisors: J. DeVault, G. Hutchinson

1999-2000

ALLISON LONG

"Public or Private? Educational Returns by Race and Gender"
Advisor: S. Averett, M. Beckman, and T. Hill

BRAEDEN ROGERS

"Racial Difference in Portfolio choice"
Advisor: D. Chambers, S. Averett, R. Bukics, and A. Childs

JOSHUA SHANNON

"Getting to the Core of America's Chernobyl"
Advisor: J. Heavey, H. Bodenhorn, & D.C. Jackson

TERESA SCHROEDER

"The Past, the Present and the Future: A Comparative Study of Women's Labor Force Participation in Japan, The United States and China"
Advisor: S. Averett

1998-99

KYLE FOLEY

"College Students and Apartment Rents"
Advisor: J. Heavey

MATTHEW GOODMAN

"Customer Demand and Discrimination in the Baseball Memorabilia Market"
Advisor: H. Bodenhorn, J. DeVault and D. Shulman

GENEVIEVE DEJOSE

"Scientific and Economic Aspects of Coastal Zone Management and the National Flood Insurance Program"
Advisor: T. Bruggink, J. DeVault and K. Schubel

DINO YIANNOPOULOS

"The Impact of Free Agency on Salaries in the NBA"
Advisor: T. Bruggink, S. Averett

ED RUSSO

"The 1990s REIT Boom: an Empirical Analysis of the Market Capitalization of Real Estate Investment Trusts"
Advisor: P. Shively, S. Averett

DMITRY YAKINCHUK

"A Test of Russian Stock Market Efficiency Through an Application of Trading Rules"

Advisor: P. Shively

OMER AHMED

"An Empirical Analysis of the Initial Public Offerings of 1998"

Advisor: P. Shively, S. Averett

1997-98

JENNIFER BEANE

"An Investigation of the Effects of Maternal Employment on the Cognitive Ability of Preschoolers"

Advisor: S. Averett

SHARON DALESSANDRO

"Racial and Gender Differences in the Returns to Two-and Four-Year Colleges"

Advisor: S. Averett, H. Bodenhorn, and B. McCarty

GENINE DARROUGH

"The New Earnings Per Share Requirement and Its Impact on Stock Prices"

Advisor: R. Bukics

BORIS MANDICH

"The Increasing market Participation of Women in Late-Nineteenth Century England: A Product of Political or Economics Reform?"

Advisor: H. Bodenhorn

MEGAN COOPER

"Foreign Direct Investment in Turkey"

Advisor: J. DeVault

RACHELLE RUSH

"Ocean Proximity and Regional Effects on Residential Real Estate: Hedonic Regression for Barrier Island Property?"

Advisor: T. Bruggink

BRIAN HABAS

"Let Poland Bridge the Gap Between the East and West"

Advisor: J. Heavey, and Andrew Fix

LISA HENRIQUES

"Workers, U.S. Business and the Mexican Government: Resolving

employment Conflicts in the Maquiladora Industry"

Advisor: M. Beckman

JONATHAN ELLIS

"An Analysis of Intercollegiate Athletics and Its Effects on the Academic Standards of an Institution"

Advisor: T. Bruggink

1996-97

JOSH O'HARRA

"The Living Standards of Free Blacks in the Antebellum South"

Advisor: Howard Bodenhorn

SEBASTIAN CRAPANZANO

"Pay and Performance in Major League Baseball"

Advisor: Thomas Bruggink

DIANA DODU

"The Effect of Health Insurance Type on Health Status"

Advisor: Susan Averett

BETH ANN DONOFRIO

"Making Optimal Environmental Decisions: Acid Rain Case History"

Advisor: Thomas Bruggink

MEGAN YOUNG

"What Causes a Person to Make an Investment in Human Capital?"

Advisor: Susan Averett

MARJAN ERTEFAI

"The Sewing Factor in Global Demand for Oil"

Advisor: James DeVault

HE SHEN

"Testing the Efficiency of the Eurodollar Futures Market - An Application of Genetic Algorithms"

Advisor: Donald Chambers

OLYA KHOMENKO

"The Viability of Ukraine as an Independent, Democratic, and Market-Oriented State"

Advisor: Ed Seifried & Hope Corman

YALIN KARADOGAN

"Turkey and the European Union"

Advisor: James DeVault

VERA SPIRIDOPOULO

"Shock Therapy as a Means of Macroeconomic Stabilization and Market Reform in Russia"

Advisor: Jerry Heavey

CARLA BAILEY

"Innovation Processes in the Manufacture of Musical Instruments:

Advisor: Roland Kushner

1995-96

AMY PEDEN

"The Growth of Married Women's Labor Force Participation"

Advisor: Professor Averett

IVANNA VLADKOVA

"Impact of the New Chinese Business Accounting Standards on the Usefulness of Financial Statements and on Investor's Decision Making"

Advisor: Professor Bukics

SEAN FAULKNER

"The Impact of Export Processing Zones and U.S. Harmonized Tariff Schedule Provision 9802.00.80 on the Economy of the Dominican Republic"

Advisor: Professor DeVault

ADAM GOLDEN

"Thesis Proposal: Self-Interest Theory and the Possibility of Morality"

Advisors: Professors Hochman & Gruen

MELISSA ROE

"Differential Tolerances and Accepted Punishments for Disobedient Indentured Servants and Their Masters in Colonial Courts"

Advisor: Professor Bodenhorn

STACY DURBIN

"Defining the Relationship Between the Interest Rate and the Exchange Rate Upon Latin America Trade Structure and Competitiveness"

Advisor: Professor Hutchinson

HELENA OCAMPO

"The Accord for Immediate Assistance to Debtors (ADE) in Mexico: An Effective Rescue Measure?"

Advisor: Professor Hutchinson

STEPHANIE TOLISCHUS

"Germany's Treuhand"

Advisors: Professors Schumacher and Lamb-Faffelberger

ANTHONY RADICH

"The Economics of Suicide"

Advisors: Professors Averett & Hochman

BRYAN LLOYD

"Financial Intermediation and Real Business Cycle Models: The Quantification of Nominal Variables and the Cyclical Behavior of Bankruptcies"

Advisor: Professor Gamber

ROBERT DIXON

"The Difference Between the Put Option Pricing Model and Reality"

Advisor: Professor Chambers

JUSTIN ZAMPARELLI

"When They Build It, Where Will It Be? An Econometric Model of The Determinants for Location of Major League Baseball Expansion"

Advisor: Professor Bruggink

1994-95

ERIK O'DONOGHUE

"Capital Accumulation and Mobilization Within the Inner Cities: The Use of the Cooperative"

Advisor - Professor Hutchinson

CHARLES DODGE

"An Examination of the Relationship Between the Personal Exemption and the General Fertility Rate"

Advisor - Professor Averett

IAN GUTTERMAN

"A Threshold Model of M2 Money Demand"

Advisor - Professor Gamber

DEBORAH CAMPBELL

"An Analysis of Economic and Psychological Components of the Gender Wage Gap"

Advisors - Professors Averett and Vinchur

ERIC BERENSON

"An Economic Analysis of Federal AIDS Funding"

Advisor - Professor Gamber

1993-94

KATIA LIPMANOWICZ

"China: Income Inequality, Social Unrest and Growth"

Advisor - Professor Beckman

ANDREA PIPER

"FASB Proposal for the Treatment of Stock Options and the Evaluation of Stock Option Pricing Models"

Advisor - Professor Engle

DEEPAK SATHE

"The Role of NGOs in Development: From Participation to Self-Reliance"

Advisor - Professor Hutchinson

1992-93

CHERYL WHITNEY

"Women and Mothers: Family and Career Patterns in Management"

Advisor - Professor Averett

CAROLINE DAVIDSON

"Discrimination and the Wage Gap Between Young Men and Women"

Advisor - Professor Averett

1991-92

SUJHA SUBRAMANIAN

"A Econometric Cross-Country Analysis of Female Unemployment"

Advisor - Professor Beckman

HANS DIP BINDRA

"The Efficiency of the Indian Forward Exchange Market (1989-1991)"

Advisor - Professor DeVault

AMY HUTCHINSON

"The Distributional Effects of Land Taxes"

Advisor - Professor Heavey

JUNIOR YEAR PREPARATION

You should begin your honors thesis preparation during your junior year by taking an upper level course in the subject area that you are interested in investigating. Taking an advanced course in the area in which you hope to do research provides basic knowledge, which will be very useful in the honors thesis that follows. Most professors will require that you have taken the related courses before agreeing to a thesis.

An honors thesis usually requires that some preparatory work be done during the junior year. For this reason, some students will want to take an Independent Study course with the faculty mentor in their junior year prior to the honors thesis (these courses may be one, two or three credit courses). A junior year Independent Study course will allow the student and the faculty mentor to develop a tentative research plan early enough to insure that the proposed project is viable and that the data necessary for the project exist. Whether the student takes an Independent Study course or not, by the end of the spring semester of the junior year the student and the mentoring faculty member should have reached an agreement about the subject matter and the scope of the proposed honors thesis. **An essential element of all economics and business department honors thesis is the application of economics and/or business analysis. (Interdisciplinary work may, of course, involve other fields as well.) The student and the faculty mentor should discuss the type (or types) of analysis that will be applied and how the analysis will be used in the proposed honors thesis.** The faculty mentor must agree to work with the student, and must approve the topic to be investigated. Often, an initial idea needs to be reworked to become a suitable thesis topic.

Although each honors thesis will apply economic and/or business analysis to a specific set of facts, the form of the analysis may be quite varied. A few honors projects will be primarily theoretical with little or no empirical content. Some projects will follow the case study approach. Other projects will be highly empirical with an econometric model and formal hypothesis tests. And still other projects will find new and unique ways to use economic and/or business analysis.

During the junior year, it is a good idea to attend the preliminary presentations (proposal defenses) and the final honors defenses of seniors who are engaged in honors projects. Attending these

presentations is the best way to learn what to expect at your proposal defense and final defense.

FALL SEMESTER OF THE SENIOR YEAR

The student enrolls in Thesis (Economics 495) and begins the honors thesis. Frequent meetings and discussions between the supervising faculty mentor and the student are essential in a successful honors thesis. Although the styles of individual professors and students vary, it is an excellent idea for the mentor and research student to meet weekly and discuss the progress and direction of the honors thesis as it proceeds.

The student and the faculty mentor should discuss and agree upon the members of the honors thesis committee and their roles. Each honors thesis committee consists of the mentoring faculty member, at least one additional faculty member from the Department of Economics and Business and at least one faculty member from outside the Department of Economics and Business. (Interdisciplinary thesis committees may be comprised of one faculty member from each discipline and one outside member.)

An **initial honors thesis proposal** must be submitted for comment and approval of the faculty mentor (and the committee where appropriate.) This **initial proposal** should contain the following elements:

- 1) an introduction (including a clear statement of the problem and why it is of interest);
- 2) a brief literature survey
- 3) a statement of methodology which outlines the specific analysis and/or studies to be done; and a description of the data, if any, that will be used in the analysis
- 4) expected results and implications

A sample **honors thesis proposal** is included in **Appendix ii** of this manual.

The student will write and submit a **formal honors thesis proposal** prior to the end of classes in the fall semester. This report will be an extensive and final version of the initial proposal and will

include an introduction, full literature review and theory with a complete bibliography. Normally, this report will be at least ten pages in length. Samples of the **formal honors thesis proposal** are available for your perusal in the department office.

This formal proposal and the student's conduct as a researcher will be the basis for the grade given in Thesis for the fall semester.

The student must earn an "A" in order to enroll in Thesis in the Spring semester. A grade of "A-" or lower will mean that the student must enroll in Independent Study if he or she wishes to continue the research project, and the first semester course will be converted into Independent Study credit.

Sometime late in the fall semester (usually the last week of classes December) the honors student is required to present to faculty and other honors students an informal research seminar on her or his work to date. This is called the **proposal defense**. This seminar will serve as a chance for all concerned to discuss the student's progress and to suggest additional issues for study while there is still time for their completion. Juniors who are contemplating honors thesis will also be invited to the presentation. After this presentation, department members will meet to decide who will be allowed to continue their these work.

The due dates for the initial proposal and the full proposal are in appendix vii.

SPRING SEMESTER OF THE SENIOR YEAR

The student enrolls in Thesis (Economics 496) and continues the honors thesis. The student and mentor must complete and submit a Notice of Candidacy for Graduation With Departmental honors form to the Committee on Honors and Academic Awards by the end of the second week of classes.

In order to allow sufficient time for revisions after the public defense, it is important to complete the major portion of the work early in the spring semester. In late February students will present work to each other and give a complete accounting of their work since the proposal defense. No later than six weeks before the end of classes, the student should have a very good idea of the final form of the honors thesis, including the analysis, graphs, diagrams, tables and econometric results which it will contain. Copies of departmental honors theses are available in Skillman Library; the student should peruse recent honors thesis for examples. **Appendix iv** outlines the format to be used.

Four weeks before the end of classes, the student will submit a draft of the honors thesis to the student's committee for final committee comment. This includes all 3 readers. This draft will be a close approximation of the final thesis. The student should carefully consider each of the committee's members comments and make all necessary changes in the next draft of the thesis that will be available to the entire department 2 weeks before the public defense.

Due dates are in appendix vii.

DEFENSE OF THE THESIS

Approximately one week before the end of classes (typically the last week of classes) the student will make a public presentation and defense of his or her thesis. The audience at the defense will include the Economics and Business faculty, the outside member(s) of the student's committee, juniors who are contemplating honors theses, interested students and any guests who may be invited to attend the presentations.

Students must keep in mind that many in the audience will not be familiar with the research jargon specific to their area of investigation and should make every attempt to present their results and conclusions in a clear fashion. The thesis presentation is not just a reading of a scholarly paper in a format suitable for publication, but is aimed more broadly at the entire college community.

Thesis presentations are approximately thirty minutes long and are followed by a period of questions and answers. The presentation begins with an introduction of the subject, including a literature summary, followed by a statement of the research question, a description of the methodology and data, and concludes with a discussion of the significance of the results. After the thesis is presented, first the committee members and then others in the audience may ask questions. The student's answers should demonstrate that she or he has a thorough knowledge of the research area, the methods employed and how the particular research findings fit into the larger body of knowledge in the research area. Further suggestions on the thesis defense are included in **Appendix v**.

Successful presentation and defense of the thesis by the student and submission of an acceptable final draft of the thesis during the final examination period will complete the departmental requirements for graduation with honors in Economics and Business. When the departmental requirements have been fulfilled, the members of the student's committee sign and forward the appropriate documents to the Faculty Committee on Honors and Academic Awards.

At the last faculty meeting of the academic year, the Faculty Committee on Honors and Academic Awards moves that the Faculty recommend to the Board of Trustees that all successful honors candidates be allowed to graduate with departmental honors and the

Faculty votes on the motion. After the Trustees accept the faculty's recommendation, a notation of "Graduation with Department Honors" is made on the transcript of each student so designated. Students graduating with department honors are noted on the commencement program and announced when the diploma is awarded.

APPENDIX i: SCHEDULE FOR HONORS STUDENTS

The following schedule is a brief summary of the steps which take place during the honors thesis preparation and presentation process. Failure to comply with any of the stated deadlines will result in termination of the thesis.

Junior Year

Course work in an upper level business or economics course and consultation with the research mentor resulting in agreement on the research to be done. Students may want to take an Independent Study course with the mentor in their junior year prior to the honors thesis. They may also wish to do some reading over the summer to be fully prepared.

Fall Semester of the Senior Year

1. With the permission of the faculty mentor and an approved preliminary idea, the student enrolls in Econ. 495, Thesis, and begins the honors thesis;
2. the **initial honors thesis proposal** is submitted to the faculty mentor and other appropriate members of the thesis committee by the end of the third week of classes for review;
3. the **formal honors thesis proposal** is submitted to the committee three weeks prior to the end of classes.
4. Presentation and defense of the proposal to the economics faculty and fellow honors students is made usually during the last week of classes.

Spring Semester of the Senior Year

1. The student enrolls in Econ 496, Thesis, and continues the honors thesis.
2. A "Notice of Candidacy for Graduation With Departmental Honors" form is submitted to the Faculty Committee on Honors and Academic Awards by the end of the second week of classes.
3. By the midpoint of the semester, the thesis should be well outlined and work on any figures, data tables, and statistical tests underway;
4. Four weeks before the end of classes a complete draft of the honors thesis is circulated to the student's committee for approval and comment;
5. Two weeks before the end of classes the student will submit a

revised thesis to their committee having responded to committee members' comments.

6. One to two weeks before the end of classes, the student will defend the thesis; as soon as possible after the defense the faculty mentor will submit a completed "Approval of Thesis" form to the Committee on Honors and Academic Awards;

APPENDIX ii: SAMPLE INITIAL HONORS THESIS PROPOSAL

This was a proposal written recently by a student. Note that it outlines exactly how the research will be conducted, and refers to previous related literature.

The initial proposal is due by the end of the 3rd week of classes

In their paper "Fertility and the Personal Exemption: Implicit Pronatalist Policy in the United States", Leslie Whittington, James Alm, and H. Elizabeth Peters (1989) specified an aggregate fertility equation to examine the effects of tax policies and other related independent variables on the national birthrate. Their primary discovery was that the personal exemption, inherent in the U.S. tax code, has a positive, statistically significant effect on the national birthrate. They also find that middle income families receive the highest birth incentive, while low and high income groups actually receive a disincentive to births. The authors conclude that the United States and other countries can influence, to a degree, the national birth rate through changes in tax policy.

The purpose of my honors thesis is to explore this topic further by modifying the aggregate fertility equation employed by Whittington, Alm and Peters (1989). To do this I will update their data set to capture the most recently available data, and I will add additional regressors, which I feel belong in the equation. In particular, I am interested in the effects of AFDC (welfare), the tax changes implemented during the Reagan administration, the divorce rate, and the percentage of families headed by single women. These variables are theoretically linked to fertility; my goal is to see if there is an empirical relationship as well.

I will gather the additional data at Skillman library, and use the TSP software to estimate the model.

Elasticities of the response to changes in the birth rate when the personal exemption changes will be calculated. A variety of lagged specifications will also be tested, since the birth of a child lags the decision to have a child.

Work Cited

Whittington, Leslie A., Alm. James, and Peters, Elizabeth H.,
"Fertility and the Personal Exemption: Implicit Pronatalist
Policy in the United States:", The American Economic Review,
Vol. 80, NO. 3, June 1990, pp. 545-556.

APPENDIX iii: SUGGESTIONS FOR EFFECTIVE FIGURES AND TABLES

Graphs, diagrams and photographs are called figures when presented in a scholarly paper. Figures are always numbered in the order in which they are first mentioned in the text of the paper. Each figure should have an explanatory legend, which states what is being shown and the source of the data; this allows the reader to use the figure as a source of information without reference to the text. In some cases methods of preparation, scale and other relevant information may be noted in the legend. Figure legends may include a comment drawing the reader's attention to some salient point illustrated. Figures frequently have their own footnotes, which present important facts about methods used or about the statistical significance of the data in the figure.

Tables also have legends. Again, the reader should be able to assimilate the data in the table without reference to the text. Tables may also have their own comments and footnotes.

An example of a table demonstrating statistical results is provided on the following page.

Table

Substantive title, as completely descriptive as possible, and accessible to readers without a background in statistics.

--> Table 3. Determinants of the Distribution of Earned Income, 1949-76: First, Third, and Fifth Quintiles. (Metric Coefficients; Standard Errors in Parenthesis)

Give every column a heading. Use plain English or sensible abbreviations for all variables.

--> Independent Variable	(1) Lowest Quintile	(2) Third Quintile	(3) Fifth Quintile ^a
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Use increasing numbers of asterisks to denote increasing levels of statistical significance.

No more than three decimal places unless finer specification is meaningful.

--> Inflation	3.02** (1.2)	1.75 (2.35)	-7.27 (8.63)
Unemployment	-.02** (.01)	-.15 (.04)	.54** (.16)
Strike Frequency	.34 ^b (.30)	.51 (.47)	-.05* (.11)
System R ²	.993 ^c		

Table footnotes should include sources, notes (keyed a, b, c, etc.) explaining cryptic or ambiguous elements, and an explanation of significance levels. If necessary, a source for the table information should be included.

--> ^a OLS estimation.

^b Coefficient and standard error multiplied by 100.

^c R² for equation.

* Statistically significant at the .10 level; ** at the .05 level (two-tailed tests).
Source: See Data **Appendix**.

APPENDIX iv: HONORS THESIS FORMAT

The honors thesis is written in the general form of a scholarly paper. Thus, it has several discrete parts which serve different purposes. These parts are listed and discussed below.

TITLE PAGE -- This lists in separate paragraphs the title of the honors thesis, its author and the thesis advisor.

TABLE OF CONTENTS--

ABSTRACT -- An abstract is a statement of the major findings of the study; it is not a summary of the entire thesis. The abstract should begin with a statement of the purpose of the study or a statement of the hypothesis to be tested and then present the major findings. A good abstract ends with a one or two sentence summary of the significance of the findings. Researchers invariably read the abstract first to determine if they wish to read the entire paper. For this reason, it should contain the elements noted above.

INTRODUCTION -- The purpose of the introduction is to present the reader with a concise summary of what was known about the subject to be investigated at the start of the study. This section often contains a historical perspective. In order to write such a summary, the student will have to find, read and digest the literature on the subject. A good introduction always answers the questions, "Why did I perform this study?" and "Why is this problem of interest?" Further, a good introduction always ends with a paragraph clearly stating the research problem and the purpose of the study.

LITERATURE REVIEW -- The student should read and study the available scholarly literature on the subject. The thesis should contain a summary of the relevant literature, which discusses how the major articles and theories in the field apply to the problem to be investigated. The literature review should show how the hypothesis to be tested in the thesis relates to the literature and how the tested hypothesis supports or refutes the existing literature.

METHODOLOGY -- In this section of the thesis, the student identifies and describes the source and nature of the data used, identifies the types of analysis to be performed and any other special tests or methods that will be used. Although brevity is

always laudable, sufficient detail must be included so that another researcher could repeat the study if he or she wished to do so; repeatability is, of course, the essence of the scientific method.

RESULTS -- In this section the student answers the question, "What did I find?" Results are presented in turn as serially numbered figures and tables and the major trends of the data are pointed out to the reader. Not all data require their own figures or tables; in some cases it is appropriate to simply mention a single important datum or observation in a separate paragraph. The results section is not the place to discuss the significance of the findings or to compare them with those of other workers.

DISCUSSION -- This is usually the most important section of the thesis. Here the student answers the question, "What does it all mean?" Not surprisingly, this is usually a hard question to answer definitively. The findings of the study are discussed within the larger context of what is known about the subject and a synthesis of the new facts with the old ones is attempted. In the last paragraph of the discussion it is appropriate to suggest directions for further research.

ACKNOWLEDGEMENTS -- This is the place to credit those who have helped you in the analysis, in the preparation of the thesis and in its presentation. Use complete names and indicate the exact nature of the assistance. Be certain to acknowledge any financial support from grants.

LITERATURE CITED -- Here the student lists, in alphabetical order by first author, all of the published or unpublished works, personal communication, etc., which were mentioned in the text of the thesis. Students should employ the format in **Appendix vi**.

TABLE -- Here the tables are presented in numerical order on separate pages in their own section. See **Appendix iii** for an example.

FIGURES -- The figures are grouped together in this section in numerical order on separate pages. See **Appendix iii** for more information on preparing figures.

USE OF FOOTNOTES OR ENDNOTES -- Students can use either footnotes or endnotes in their thesis. You cannot use both. They should be numbered consecutively. *Footnotes/endnotes should be used only for explanatory notes and citations (such as legal citations) that*

are not easily accommodated by the "scientific" system of in-text citation. An example is given below.

--> Notes

¹When blacks and whites are combined, our data show a small rise of 2% (1.2 percentage points) in the female-male ratio of median earnings for year-round, full-time workers, in contrast to the stability reported in the published statistics. The small discrepancy exists because.....

CITING LITERATURE IN THE TEXT -- Students should use the in-text "scientific" system. An example follows:

Strategy of the Analysis

To gain a more accurate picture of trends in labor market treatment of women relative to men over this period, we consider trends in earnings ratios after adjustment for gender differences in selectivity bias, time input (hours and weeks worked), and other factors determining wages. Then, in order to identify specific influences that have worked to increase or reduce women's earnings relative to men's, we apply a standard technique (see, for example, Blinder 1973:438-41) to decompose the changes in earnings differentials over the period....

APPENDIX v: Defense of the Honors Thesis

The student's presentation and defense of the thesis does not resemble a scholarly paper, which is simply read to the audience. The purpose of the defense is to present the major findings of the study to an intelligent audience. The thesis defense allows the student to demonstrate that he or she understands and can apply economic and/or business concepts to a specific problem.

The thesis defense should begin with a succinct statement of the problem to be investigated and a review of only the most important literature on the subject. This is a good place to summarize what is known about the subject. A brief statement of the methods used in the study should also be included. The introduction should end with a clear statement of the purpose of the study and/or a statement of the hypothesis to be tested.

The next stage of the defense should be spent describing the source and type of data, if any, used in the analysis. The student should explain the important aspects of each graph and/or data table presented. The audience will appreciate a brief summary statement of what each table or graph is designed to show, how it fits into the study and a transition to the next presentation.

In the final stage of the defense, the student should present a synthesis of the findings of the thesis with the body of published knowledge on the subject. This is where the student tells the audience "what it all means." Expected and unexpected findings should be integrated into the discussion. At the end of the presentation, directions for further study may be suggested.

Having presented the thesis, the student must now be able to defend it against reasonable criticism in the form of questions from the audience. This is a very important part of the thesis presentation. The student should prepare for a wide range of possible questions by trying to anticipate what kinds of queries about methods, data interpretation (particularly statistical methods) and validity of results might be asked by the audience (many of whom will be professional economists). Practicality is an element in all research. Do not forget that one of your tasks is to convince the Economics and Business faculty that you are worthy of graduation with honors! Admission of ignorance is never a sin and if the answer to a question will not come to you, do not despair. Faculty are noted for their gentle attempts to lead thesis students toward a correct or, at least, acceptable response

to a difficult question.

Suggestions for Power Point Usage

If you choose to use power Point, follow the guidelines below for an effective presentation:

- a. *Power Point* must be used effectively. For a presentation (as opposed to using PowerPoint to teach a class) to be effective, it should contain no more than 3 or 4 lines per slide and no more than 3 or 4 words per line. Anything more than that is distracting to the audience and detracts from the effectiveness of your presentation.
- b. Use the options available for both format and coloring of the presentation. For viewing a presentation, a dark background with lighter lettering is considered to be most effective.
- c. Make sure that there is a logical sequence to your slides so that the information is presented in a coherent manner than enhances your presentation.
- d. Refrain from overusing sound effects and other special effects that may be distracting to your presentation.

During the question and answer session, each honors candidate should be prepared to entertain a variety of questions. You may wish to ask committee members in advance if they can provide at least a partial list of the questions they might ask. You must convince your committee that you understand and are comfortable with the content that you are presenting and you must be able to intelligently discuss the importance of your work. Failure to do this can result in graduating without honors.

APPENDIX vi: References: Students should employ the following format when citing references:

- Article in a book.* Blau, Francine D. 1984. "Occupational Segregation and Labor Market Discrimination." In Barbara F. Reskin, ed. Sex Segregation in the Workplace: Trends, Explanation, Remedies. Washington, D.C.: National Academy Press, pp. 117-43.
- Proceedings.* Blau, Francine D., and Marianne A. Ferber. 1987. "Women's Progress in the Labor Market: Should We Rest on Our Laurels?" Proceedings of the Thirty-Ninth Annual Meetings (New Orleans, Dec. 28-30, 1986). Madison, Wis.: Industrial Relations Research Association, pp. 70-76.
- Journal article.* Blinder, Alan S. 1973. "Wage Discrimination: Reduced Form and Structural Elements." Journal of Human Resources, Vol. 8, No. 4 (Fall), pp 436-55.
- Dissertation.* Ellis, Martin G. 1984. "Men's and Women's Earnings in Manufacturing, 1939-1970." Diss. University of Illinois.
- Book.* Freeman, Richard B., and James L. Medoff. 1984. What Do Unions Do? New York: Basic Books.
- Newspaper article.* Pear, Robert. 1987. "Women Reduce Lag in Earnings but Disparities with Men Remain." New York Times, September 4, p. A1.
- Government publication.* U.S. Bureau of the Census. 1983. Census of the Population: 1980. Characteristics of the Population, General Social and Economic Characteristics, United States Summary. Report PC80-1-C1. Washington, D.C.:CPO.
- Unpublished paper.* Yoruba, Baswan. 1992. "Characteristics of Women with Higher-Paying Jobs in White-Collar Occupations." Unpublished paper, University of Pennsylvania.

For sources from the internet, see the Skillman Library Homepage where there are several examples.

Appendix vii:

**New requirements for Honors Students 2002-2003
Approved by the Economics and Business Department Spring 2002.**

1. All students will purchase the book "Writing Empirical Research Reports" which is available at the College Store.
2. All students registered in the honors course will meet one-hour per week with the department honors coordinator. Attendance is mandatory. Students missing more than two meetings may have to terminate their thesis.) At these meetings we will accomplish three goals. First, we will go through the "Writing Empirical Research Reports" book. Second, Economics and Business faculty will present recent research to students. Third, students will present on an article they are using for their literature review or on any aspect of their thesis that they would like to discuss. We will also schedule two library sessions to discuss data and literature review issues. A reference librarian will work with us teaching students how to search for literature in the library and how to find data. These library sessions are mandatory.
3. A discussion board for all thesis students and all Economics and Business Faculty will be set up on Blackboard. Each week at the honors meeting a question will be posed to students. Each student is expected to respond. Department members will be able to provide feedback individually to each student.

Here are some of the questions.

- A. Why are you writing a thesis? What do you hope to learn from this process?
- B. Discuss why you chose your topic and why you find it interesting and worthy of your time.
- C. Discuss your hypothesis in detail. What are you asking? What do you expect to find?
- D. Discuss the literature search you are doing. What articles are you finding? What are some seminal articles in this area? Describe their content in one or two paragraphs.
- E. In light of the literature you have read, do you have

- any modifications to make to your hypothesis?
- F. What is the outline of the logical argument that you are making? [Because the answer to this question will change as research progresses, I will ask it at the beginning of the fall, at the end of the first semester and at Spring Break.]
- G. What data will you use to test your hypothesis? How will you accomplish this testing? (regression analysis, case studies etc.)
- H. What are your preliminary results?
4. Each student is **strongly** encouraged to present his/her research at one conference. NCUR & Ursinus College are two venues for this but other presentations are possible.
5. The following deadlines are imposed and must be met by all students enrolled in thesis. Failure to comply can result in termination of the project.
- 1 page statement of hypothesis. By 9/9/04
 - One week before Thanksgiving break a full proposal draft which includes an Introduction, Literature Review, Statement of Hypothesis and discussion of where this thesis fits into the literature, overview of the method that will be used to test the hypothesis and a statement of what data will be used and when you will have the data. By 11/18/04.
 - Last week of classes in fall semester: proposal defenses.
 - Week before spring vacation, present preliminary results to faculty.
 - End of first week in April, entire draft of thesis due to all committee members. Student obtains and incorporates comments from all committee members at this time.
 - End of third week of classes in April, student provides Dept. of Economics and Business with a defense ready copy of the thesis.
 - Last two weeks of classes and first two days of finals, 2 hour defenses scheduled.