



REQUEST FOR APPROVAL TO USE W-DESIGNATION

LSC # WI 209
Action _____

COVER SHEET: Request for Approval to Use W-Designation

TYPE I. PROFESSOR COMMITMENT

- Professor & Phone James J. Jozefowicz Phone 724-357-4774
- Writing Workshop? (If not at IUP, where? when?) Yes, May 2000
- Proposal for one W-course (see instructions below)
- Agree to forward syllabi for subsequently offered W-courses? Yes

TYPE II. DEPARTMENT COURSE

- Department Contact Person & Phone
- Course Number/Title
- Statement concerning departmental responsibility
- Proposal for this W-course (see instructions below)

TYPE III. SPECIFIC COURSE AND SPECIFIC PROFESSOR(S)

- Professor(s) & Phone
- Course Number/Title
- Proposal for this W-course (see instructions below)

SIGNATURES:

Professor(s) James J. Jozefowicz Date 2/12/02
 Department Chairperson Wick Date 2/13/02
 College Dean [Signature] Date 2/14/2002
 Director of Liberal Studies Thoy J. Sadler Date 3-20-02

**PROPOSAL FOR TYPE I PROFESSOR COMMITMENT STATUS
FOR WRITING INTENSIVE COURSES
ECON 356: INTRODUCTION TO ECONOMETRICS**

I propose that my Introduction to Econometrics (ECON 356) course be designated as a “W” course in the liberal studies program. I generally teach one section of this course each academic year or every third semester and anticipate continuing this schedule in the future. Students enrolled in the course are typically upper-level students who have completed Principles of Economics I and II (ECON 121 and 122) as well as a course in Probability and Statistics (MATH 214, 216, or 217). The students tend to be split roughly equally between economics or business. Class size is limited to 20 students and approximately 12 enroll each time.

Types of writing required:

1. **RESEARCH PAPER.** The major assignment in the course is the research paper which is announced the first day of class when instructions for the paper are distributed (please see the attached copy of the research paper instructions). I currently require a 10-15 page paper with accounts for 35% of the final course grade. The objectives of this assignment are: to get the students to apply the econometric techniques studied in class to their own data set and research questions; instruct students in the type of scholarly research conducted by economists; and to teach them how to write a research paper in a fashion appropriate to the discipline.

The students are required to meet with me three times during the semester in order for me to monitor their progress. I offer numerous suggestions for topics including a list of successful student topics from an econometrics textbook, and direct them to upper-level economics textbooks and the economics literature for possibilities as well.

I set a deadline for topic approval and require the students to submit an outline, a brief statement of their thesis, data source(s), and a list of references they plan to use. This enables me to assess the feasibility of their project and provide direction to additional references and resources that they have not located. I also suggest changes to their outline where necessary.

A rough draft of the paper is required and I edit that draft extensively for application of econometrics, content, style, and organization. Each rough draft is also distributed to two peer referees for their comments and suggestions. The student then has an opportunity to incorporate revisions before submitting the final draft of the paper.

The paper is due during final exams following a classroom presentation of the paper which takes place during the last two weeks of classes.

This assignment has been an excellent learning tool. Students have commented on how much they have benefited from the research paper in spite of the amount of work involved. In addition, students have gone on to present these papers at professional conferences and have had them published in the proceedings volumes of the conferences.

2. **RESEARCH NOTEBOOK.** As part of the research paper project students are required to keep a research notebook which accounts for 5% of their final course grade. The notebook enables students to keep track of each and every step as they conduct their research. It provides a central location for storing information relevant to the study including data sources, literature references, ideas and thoughts, and keeps them organized. The students bring their notebook with them to progress meetings so that they can record the points we discuss. The notebooks are evaluated on the basis of their content and completeness.
3. **REFEREE REPORTS.** Each student is required to write two referee reports during the semester commenting on the rough drafts of two of their colleagues. This assignment is intended to simulate the review process of a refereed journal and assist the author in the development of their paper. It is expected that the referee will offer constructive criticism by pointing out errors, offering corrections, and suggesting improvements to the author. The students are provided with instructions to guide them in writing their referee reports and evaluated on the helpfulness and insightfulness of their responses (please see the attached copy of the referee report instructions).
4. **NOTES.** Class notes are invaluable for quiz preparation as I expand on the textbook explanations and attempt to better elucidate the material. Therefore, students are encouraged to concentrate on keeping very good notes. However, since it is only by doing econometrics that one actually learns econometrics, experience is an important teacher. The course textbook contains the statistical background, technical details, and explanation of the topics, but it fails to provide the nuances understood from the practical application of them. Therefore, a significant portion of class time is devoted to discussing what the students and I have learned from doing econometric research. By sharing our experiences we help each other navigate the research paper project and learn econometrics better. Thus, class notes based on these discussions are also essential to the students' learning. In fact, they rely heavily upon these notes as their research takes shape and they grapple with their data, operate the econometric software, and interpret their results.
5. **QUIZZES.** My quizzes require students to interpret econometric results and provide explanations of their answers. Responses that are not supported by an appropriate justification do not receive full credit. Typically, the answers range in length from a couple of sentences to half a page, depending upon the question. I expect thorough, coherent explanations.

Amount of writing:

The research paper will average about 12 pages or 3,000 words. The research paper outline and statement of the thesis submitted are generally about 500 words. The research notebook usually contains about 750-1,000 of actual writing and the two referee reports result in a total of four pages or 1,000 words. Taking class notes into consideration should easily exceed the 5,000-word guideline even without counting the quizzes.

Summary of writing assignments for ECON 356

Assignment	# of Assignmts	Total # of Pages	Graded (Yes/no)	Revisions (Yes/no)	% Final Grade
Research Paper	1	10-15	Yes	Yes	35%
Research Notebook	1	variable	Yes	No	5%
Paper Outline & Statement of Thesis	1	2	No	Yes	0%
Referee Reports	2	4	Yes	No	5%
Notes	NA	variable	No	No	0%
Quizzes	5	<10	Yes	No	20%

Indiana University of Pennsylvania
Department of Economics
Spring 2001

Course: ECON 356 Introduction to Econometrics
Section: 001
Meetings: Tuesday & Thursday 1:15 – 2:45 PM in MCL 212
Instructor: Dr. James J. Jozefowicz
Office: MCL 202E
Email: jimjozef@grove.iup.edu
Phone: 724-357-4774 (Office) 724-357-2640 (Department)
Hours: Monday & Wednesday 3:15 – 5:15 PM
Friday 3:15 – 4:15 PM and by appointment

Texts: A.H. Studenmund, Using Econometrics: A Practical Guide, 4th edition, Addison Wesley Longman.

Other readings may be assigned.

Software: Since econometrics involves the application of statistical techniques to economic data, the econometric analysis performed in this course will utilize the EA/Limdep 1.0 software. The machines in the Leonard computer lab have been outfitted with this package. In addition, the software is *freely* downloadable from Professor William H. Greene's web site at New York University under EA Limdep along with its corresponding manual. [<http://www.stern.nyu.edu/~wgreene/Text/econometricanalysis.htm>].

Web Sites: The Economics Department maintains a web site with information about its programs of study, concentrations, course schedule, and faculty. It also includes links to sites of interest to economics students and economists [<http://www.iup.edu/economics/>]. A list of other useful web sites appears at the end of this syllabus.

“Doing econometrics is like trying to learn the laws of electricity by playing the radio.”
-George Orcutt

Prerequisites: ECON 355 or its equivalent or permission of the instructor

Catalog Description: An introduction to econometrics, including linear normal regression models of two or more random variables, special econometrics problems, and solutions of simultaneous equations.

Course Overview: Students will become proficient in the techniques of applied econometrics by working with economic data and improve their writing through a research paper project. The approach will be primarily “learning by doing” wherein class topics will be complemented by computer exercises and problem sets. In this manner, students will be exposed to the actual work done by many economists in both academic and non-academic settings. Moreover, students will become conversant in the use of EA/Limdep as an econometric software package widely used in the discipline.

Important Dates: The individual course withdrawal date is Thursday March 29, 2001.

Attendance Policy: It is expected that you will attend class. Your regular attendance in class will be vital for your success. Class participation is welcome and encouraged.

Procedure: Please do not hesitate to ask questions in class, after class or during office hours. If my office hours are not convenient for you, please see me about arranging an appointment. I stand ready and willing to help you with any difficulties you experience in this course. It is advisable that you routinely review your class notes in order to stay abreast of the material and to identify any questions you might have in advance of a quiz.

Accommodation Policy: Communication is the cornerstone of any relationship. This even applies in the classroom. So, if situations arise that affect your ability to meet the requirements and demands of this course, I implore you to communicate that to me as soon as possible. My ability and willingness to be flexible and accommodate you is much greater if you inform me of any extenuating circumstances as soon as they arise. A phone message or email is sufficient in the event you cannot reach me personally.

Grading Policy: There will be a series of announced quizzes, homework and/or computer exercises. The quizzes will count 20%. In addition, a research paper and presentation are required comprising 35% and 10% of the grade, respectively. The rough draft of the research paper will account for 10% of the final grade. The details and topics for the research paper will be discussed in class. Students will be required to serve as referees and to keep a research notebook as part of this assignment. These two components are each worth 5% of the final grade. Homework will comprise 15% of the grade. Quiz dates will be announced in advance in class. Quiz questions will be drawn from class notes, assigned readings, and various assignments.

Grading Scale: A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: below 60

Make-up Policy: Quiz make-ups will be given at the discretion of the instructor upon documentation of an appropriately extenuating circumstance (e.g. bereavement, illness, etc.). It is the student's responsibility to find out what they missed when absent from class both in terms of class material, notes, and assignments. Late assignments will be accepted at the discretion of the instructor and penalized 10% of their point total per day late.

Tentative Course Outline

Part I The Basic Regression Model

- Chapter 16 Statistical Principles
- Chapter 1 An Overview of Regression Analysis
- Chapter 2 Ordinary Least Squares (OLS)
- Chapter 3 Learning to Use Regression Analysis
- Chapter 4 The Classical Model
- Chapter 5 Hypothesis Testing

Part II Violations of the Classical Assumptions

- Chapter 6 Specification: Choosing the Independent Variables
- Chapter 7 Specification: Choosing a Functional Form
- Chapter 8 Multicollinearity
- Chapter 9 Serial Correlation
- Chapter 10 Heteroskedasticity
- Chapter 11 A Regressions User's Handbook

References

- Greene, William H. (2000) *Econometric Analysis*, 4th edition, Upper Saddle River, NJ: Prentice-Hall
- Griffiths, William E., et al. (1993) *Learning and Practicing Econometrics*, New York: John Wiley & Sons.
- Gujarati, Damodar N. (1995) *Basic Econometrics*, 3rd edition, New York: McGraw-Hill.
- Gujarati, Damodar (1999) *Essentials of Econometrics*, 2nd edition, Boston, MA: Irwin/McGraw-Hill.
- Intriligator, Michael, et al. (1996) *Econometric Models, Techniques, and Applications*, 2nd edition, Upper Saddle River, NJ: Prentice-Hall
- Johnston, Jack & DiNardo, John (1997) *Econometric Methods*, 4th edition, New York: McGraw-Hill.
- Kennedy, Peter (1998) *A Guide to Econometrics*, 4th edition, Cambridge, MA: The MIT Press.
- Lott, William F. & Ray, Subhash C. (1992) *Applied Econometrics: Problems with Data Sets*, Fort Worth, TX: Harcourt Brace Jovanovich.
- Maddala, G.S. (1992) *Introduction to Econometrics*, 2nd edition, New York: Macmillan.
- Pindyck, Robert S. & Rubinfeld, Daniel L. (1998) *Econometric Models and Economic Forecasts*, 4th edition, Boston, MA: Irwin/McGraw-Hill.

Web Sites with Economic Resources

www.dismal.com
www.economagic.com
economicsearch.com
www.economy.com
www.freelunch.com
enth.com
www.nilesonline.com
www.globalfindata.com
www.infoplease.com
northernlight.com
netec.wustl.edu/WebEc/

Federal Reserve System Sites

- Federal Reserve Board of Governors www.bog.frb.fed.us
- Federal Reserve Bank of Boston (First District) www.bos.frb.org
- Federal Reserve Bank of New York (Second District) www.ny.frb.org
- Federal Reserve Bank of Philadelphia (Third District) www.phil.frb.org
- Federal Reserve Bank of Cleveland (Fourth District) www.clev.frb.org
- Federal Reserve Bank of Richmond (Fifth District) www.rich.frb.org
- Federal Reserve Bank of Atlanta (Sixth District) www.frbatlanta.org
- Federal Reserve Bank of Chicago (Seventh District) www.frbchi.org
- Federal Reserve Bank of St. Louis (Eighth District) www.stls.frb.org
- Federal Reserve Bank of Minneapolis (Ninth District) woodrow.mpls.frb.fed.us
- Federal Reserve Bank of Kansas City (Tenth District) www.kc.frb.org
- Federal Reserve Bank of Dallas (Eleventh District) www.dallasfed.org
- Federal Reserve Bank of San Francisco (Twelfth District) www.frbsf.org

**Introduction to Econometrics
ECON 356 Spring 2001
Dr. Jim Jozefowicz**

RESEARCH PAPER INSTRUCTIONS

Since it is only by doing econometrics that one actually learns econometrics, the research paper will be a cornerstone of this course. You will be required to write an empirical paper on an economic question of interest to you. It might be a topic you have studied in other economics and related courses you have taken. My objective is to give you hands-on experience in the application of econometric techniques to real economic data and to acquaint you with the process of independent research. Your work will culminate in the writing of a paper similar to those submitted to scholarly journals for publication. While you do not have to conduct original research in your chosen area, it is expected that your paper will be a solid piece of applied econometrics, well thought out, well organized, and well written.

While the topic of the paper is your choice, be wise with your selection. You will have roughly 10 weeks to complete this project which will entail a literature review, formulation of the problem, data collection, analysis, and writing of the paper. If my personal experience is representative, the literature review and data collection phases will probably be the most time-consuming. Consult sections 11.3, 11.4, 11.5, and 11.6 on pages 393-403 of Studenmund for advice and guidance on carrying out your research project.

Someone I once knew said, "Exams come and go, but papers sit and wait for you." That is the simple truth and the reason why dissertations take more years to complete than you initially expect. You should begin your research early! In an effort to aid you in conquering this obstacle, I will require you to meet with me three times during the course of the semester. At each meeting, you will present your progress to me and we will discuss it.

First, you must formulate an economic question to investigate and conduct a literature search in that area. While an extensive literature review is not necessary (or feasible) I expect you to read several articles. To begin, I would recommend looking at topics in undergraduate textbooks where the coverage is usually quite broad. Read about your area of interest in the textbook and then seek a number of the citations provided by the author. In addition, the library staff can assist you in finding articles relevant to your research. Pay careful attention to the data used in the studies you read. Consider the availability of similar data for your own work keeping in mind that it may not be possible for you to obtain. Through this process, you should be able to assemble your topic.

Note that in the modern era, the web can be a rich source of data on many topics. In particular, visit www.freelunch.com and www.bls.gov. Consult the list of web sites on the back of your syllabus as well.

As an additional method of monitoring your progress and assisting you in the research process, you will be required to keep a research notebook. Buy a small shorthand notebook and use it to keep track of each and every step you take along the way. This notebook will provide you a central location for storing information relevant to your study and will help keep you organized. Bring your notebook with you to progress meetings with me so that you can refer to it. Believe me, a research notebook can be an indispensable tool in completing a project of this magnitude. Keeping a satisfactory notebook will count 5% toward your final course grade.

Please feel free to make frequent use of me as a resource and an adviser. Frankly, after spending three years writing my dissertation, I know what it is like conducting independent research. I will support and guide you in any way that I can along the path. It is very rare that research is completed without the help and encouragement of colleagues.

- LENGTH:** The paper should be between 10 and 15 double-spaced typed pages.
- FORMAT:** The paper should contain most if not all of the following sections: cover page, abstract, introduction, literature review, model, results, conclusions, references, and any necessary footnotes.
- DATES:** Thursday, February 8 is the deadline for your first progress meeting with me. Schedule an appointment with me prior to this date to discuss the initial stages of your research and bring your notebook with you.
- Thursday, February 15 is the deadline for topic approval. You must submit an outline, a brief statement of your thesis, data source(s), and a list of references you plan to use. I will not accept papers on topics I have not specifically approved.
- Thursday, March 15 is the deadline for your second progress meeting with me. Schedule an appointment with me prior to this date to discuss the preparation of your rough draft. Bring your notebook with you to the meeting.
- Thursday, April 12 is the deadline for submitting the rough draft of your paper. You must bring **THREE** copies of the draft with you to class that day. Two copies will be given to your referee(s) and the other will be given to me. I will look your draft over and make any necessary suggestions.
- Thursday, April 19 is the deadline for your third progress meeting with me. Schedule an appointment with me prior to this date to discuss your rough draft and the preparation of your presentation. Bring your notebook.
- Tuesday, April 24; Thursday, April 26; Tuesday, May 1 will be the dates for the classroom presentations. Your exact date and time will be determined randomly. You will be allotted about 15 minutes to present your paper to the class.
- The assigned referee(s) will provide the presenter and the instructor with referee report(s) on the day of the presentation. These referee reports will provide the basis for revisions that will be incorporated into the final draft of the paper submitted to the instructor.
- NOTE:** ATTENDANCE AT PRESENTATIONS IS MANDATORY FOR ALL STUDENTS. UNEXCUSED ABSENCES FROM A PRESENTATION WILL LOWER YOUR GRADE ON THE RESEARCH PAPER BY 10 POINTS. IF YOU CANNOT ATTEND A PRESENTATION, YOU MUST CLEAR YOUR ABSENCE WITH ME IN ADVANCE.
- Tuesday, May 8 is the final deadline for submission of the paper. A final draft of the paper reflecting the revisions from the referee report(s) must be turned in along with your first draft of the paper and the referee report(s).
- You will be penalized 2 points per day for *each* deadline missed.
- GRADING:** The quality of your presentation will count 10% toward your final course grade.
- The quality of your rough draft will account for 10% of the course grade.
- The quality of your referee reports as indicated by your referee report forms will represent 5% of your final course grade. Your research notebook will account for another 5% of the grade.

Your final manuscript will comprise 35% of your final course grade. I will, effectively, serve as the editor of the journal and accept or reject your paper after reviewing the referee reports and the final draft. You **MUST** use standard English and spell check your documents. Poor spelling and/or grammar will seriously depreciate an otherwise solid paper. There is a writing center on campus and I urge you to make use of it if you are concerned about your grammar. They will assist you in editing and improving your drafts. The writing center is located in Eicher Hall and the phone number is 357-3029. You are also welcome to consult me at any time on matters of English.

The format mentioned above included several sections. You might consider including the following in those sections:

1. An abstract containing a brief summary of the problem, the technique and the main conclusions.
2. An introduction to set up the research question.
3. A presentation of the hypothesis to be studied and a brief discussion of at least two journal articles in your literature review.
4. A description of the data employed and an explanation why it was chosen in the data section.
5. A discussion of the econometric approach used and why it is appropriate in the model section.
6. A discussion of the findings in the results section.
7. A conclusion drawn from the results of the study. This can be a restatement of the overall argument of the paper, a summary of key points, a combination of several points to make a final point, a discussion of policy implications or a call for further research.

**Introduction to Econometrics
ECON 356 Spring 2001
Dr. Jim Jozefowicz**

PEER REFEREE REPORT OF FIRST DRAFT SUBMITTED

Author of Draft: _____

Name of Referee: _____

Title of Draft: _____

Directions: Answer the following questions thoughtfully and thoroughly in order to assist the author in the development of this paper. Type up your responses on separate paper and employ complete sentences. Provide specific examples and page numbers wherever possible to make your points as clear as possible. You will be evaluated on the helpfulness and insightfulness of your responses. Try to supply constructive criticism and pose your remarks in a positive tone. Point out errors, offer corrections, and suggest improvements to the author.

Overall Progress: How close is the draft to completion? What steps should the author take to finish the project? Be both specific and helpful in listing the **three** most important steps the author should take to improve this draft. In addition, answer the following:

1. Is the topic well chosen and does it indicate a clear grasp of the purpose of the assignment?
2. Does the paper contain major errors of fact, interpretation or omission?
3. Is the paper solidly based on economic reasoning and discussion?
4. Are the econometric techniques used appropriate for the hypotheses being investigated? Are there any better techniques that might be used; no crucial variables have been omitted?
5. Are there any competing explanations for the empirical results?
6. Does the evidence from the analysis support the conclusions?

Basic Checklist: In addition to your written responses to the questions above, place a score 1-5 (5 being the highest) beside each point below on this sheet.

1. Is this draft organized in a manner consistent with the initial assignment? If not, were you able to follow the direction of the paper?
2. Does the author present an economic hypothesis and test it with the data?
3. Has the author used the references effectively and appropriately? If this area of study is new to you, did the author provide sufficient background for you to understand the objectives of the research?
4. Are the tables properly labeled, thorough, clear, and easy to understand?
5. Does the author present a clear and concise description of the data used, including descriptive statistics?
6. Is the text written using proper spelling and English grammar?
7. Are the references complete?