

ECON 4700/8706 & BSAD 8706

## **The Economics of eBusiness**

Spring 2004

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Arthur Diamond

Office: RH 512E

Office phone: 554-3657

Office Hours: 4:00 – 5:55 PM Tues. and by appointment.

Internet address: [adiamond@mail.unomaha.edu](mailto:adiamond@mail.unomaha.edu)

World Wide Web home page: <http://cba.unomaha.edu/faculty/adiamond/web/diahompg.htm>

### **Seminar Description:**

The three credit-hour seminar meets on Tuesdays from 6-8:40 PM. The course will be conducted mainly as a seminar with ample student participation, including a research paper.

A "New Economy" has often been identified with the rise of e-business. We will examine whether the rise of e-business has brought with it a change in the rules of the economy, and we will look at the effects of e-business on business, labor, consumers, and the stock market. We will focus on the effects of e-business on pricing, product specialization, economies of scale, and globalization; and we will try to judge whether the effects are likely to differ by industry. The effects of e-business on a firm's competitive advantage through increased information flow and better inventory and input management, will be examined. Another focus of attention will be "network externalities" that are alleged to justify increasing government regulation of some e-business firms, such as Microsoft.

Approximately the first 12 weeks of the seminar will focus on instructor-led discussion of important topics in the economics of e-business. Readings for this section of the course will consist of chapters from the text, as well as important, usually recent, academic papers on the topics under discussion.

During the course, some time will be spent reviewing the characteristics of good writing style in economics and on effective research techniques

During the last three weeks, or so, of the seminar, instructor-led discussions will be significantly supplemented by student presentations on topics related to their papers and reviews.

**Prerequisite:**

ECON 2200 or permission of the instructor.

**Main Required Texts:**

Christensen, Clayton M. and Michael E. Raynor. *The Innovator's Solution*. Harvard Business School Press, 2003. [ISBN # 1-57851-852-0]

Gates, Bill. *Business @ the Speed of Thought*. New York: Warner Books, 2000. [ISBN # 0446675962] {paperback edition} Assigned reading: Introduction (pp. xiii-xxii), Chs. 1-2 (pp. 3-38), Ch. 23 (pp. 407-415).

Gilder, George. *Telecosm: How Infinite Bandwidth Will Revolutionize Our World*. Touchstone Books, 2002. {paperback edition} [ISBN # 0743205472] Assigned reading: Prologue (pp. 1-11); Chs. 6-9 (pp. 61-109); Ch. 11 (pp. 132-146).

Grove, Andrew S. *Only the Paranoid Survive*. Bantam Books, 1999. [ISBN # 0385483821] {paperback edition} (Warren Buffett says this is a great book.) Assigned reading: initial Schumpeter quote, Prologue & Chs. 1-3 (pp. 3-52).

**Other Required Readings:**

Additional journal articles and chapters from monographs will be assigned on a weekly basis related to the topics that are to be discussed. Some of the readings below, may be included. These readings either will be downloadable from the web, or will be made available through BlackBoard or will be at the reserve desk of the library.

Baily, Martin Neil. "Information Technology and Productivity: Recent Findings." presented at Jan. 2003 AEA meetings in Washington D.C.

Bresnahan, Timothy F., Erik Brynjolfsson, and Lorin M. Hitt. "Information Technology, Workplace Organizational and the Demand for Skilled Labor: Firm-level Evidence." *Quarterly Journal of Economics* 117, no. 1(Feb. 2002): 339-376. (Earlier draft downloadable at: <http://ecommerce.mit.edu/erik/ITW-final.pdf>)

Brynjolfsson, Erik, Amy Austin Renshaw and Marshall Van Alstyne. "The Matrix of Change: A Tool for Business Process Reengineering." *Sloan Management Review* (Winter 1997): 37-54.

- Brynjolfsson, Erik and Lorin M. Hitt. "Beyond Computation: Information Technology, Organizational Transformation and Business Performance." *Journal of Economic Perspectives* 14, no. 4 (Fall 2000): 23-48.
- Brynjolfsson, Erik and Lorin M. Hitt. "Computing Productivity: Firm-Level Evidence." *Review of Economics and Statistics* 85, no. 4 (Nov. 2003): 793-808.
- Brynjolfsson, Erik and Michael D. Smith. "Frictionless Commerce? A Comparison of Internet and Conventional Retailers." *Management Science* 46, no. 4 (April 2000): 563-585. (Earlier draft downloadable at: <http://ecommerce.mit.edu/papers/friction/friction.pdf>)
- Brynjolfsson, Erik, Thomas W. Malone, Vijay Gurbaxani, and Ajit Kambil. "Does Information Technology Lead to Smaller Firms?" *Management Science* 40, no. 12 (December 1994): 1628-1644. (Earlier draft downloadable at: <http://ccs.mit.edu/papers/CCSWP123/CCSWP123.html>)
- [Brynjolfsson, Erik](#), Yu (Jeffrey) Hu, and [Michael D. Smith](#). "Consumer Surplus in the Digital Economy: Estimating the Value of Increased Product Variety at Online Booksellers." *Management Science* 49, no. 11 (November 2003): 1580-1596.
- Christensen, Clayton M., Scott D. Anthony and Erik A. Roth. "Innovation in the Telecommunications Industry: Separating Hype from Reality." Oct. 2001 working paper. (Read pp. 1-17 and skim the rest. In the part skimmed, focus on which of the technologies examined, appears to the authors to most likely be a disruptive technology.)
- Cummins, Jason G. and Giovanni L. Violante. "Investment-Specific Technical Change in the US (1947-2000): Measurement and Macroeconomic Consequences." *Review of Economic Dynamics* 5, no. 2 (April 2002): 243-284. (Earlier version: Federal Reserve Board, Finance and Economics Discussion Series, 2002-10 (January 2002).)
- Cox, Michael W. and Richard Alm. "The Churn: The Paradox of Progress." *1992 Annual Report of the Federal Reserve Bank of Dallas*. (Downloadable online at: <http://www.dallasfed.org/fed/annual/index.html>).
- David, Paul A. "The Dynamo and the Computer: An Historical Perspective on the Modern Productivity Paradox." *American Economic Review* 80, no. 2 (May 1990): 355-361.
- DeLong, J. Bradford. "Montreal New Economy Conference: After Dinner Remarks: A Historical Perspective on the New Economy." (Downloadable from DeLong's Berkeley web site: [http://econ161.berkeley.edu/TotW/Montreal\\_June\\_2001.html](http://econ161.berkeley.edu/TotW/Montreal_June_2001.html))

- DeLong, J. Bradford and A. Michael Froomkin. "Speculative Microeconomics for Tomorrow's Economy." (Downloadable from DeLong's Berkeley web site: <http://econ161.berkeley.edu/OpEd/virtual/technet/spmicro.html>)
- DeLong, J. Bradford and Lawrence H. Summers. "The "New Economy": Background, Questions and Speculations." *Federal Reserve Bank of Kansas City Economic Review* (Fourth Quarter 2001): 29-59 (Originally presented at the Jackson Hole Conference of the Kansas City Federal Reserve Bank, August 2001.)
- Gates, Bill. Ch. 8: "Friction-Free Capitalism." in *The Road Ahead*. New York: Viking, 1995. (HF5548.32.G38 1999)
- Farrell, Diana. "The Real New Economy." *Harvard Business Review* 81, no. 10 (Oct. 2003): 104-112.
- Feldstein, Martin. "Why is Productivity Growing Faster?" presented at Jan. 2003 AEA meetings in Washington D.C.
- Gordon, Robert J. "Does the 'New Economy' Measure Up to the Great Inventions of the Past?" *Journal of Economic Perspectives* 14, no. 4 (Fall 2000): 49-74.
- Hall, Robert. Ch. 1: in *Digital Dealing: How e-Markets are Transforming the Economy*. New York: W.W. Norton & Co., 2001.
- Hall, Robert. "e-Capital: The Link between the Labor Market and the Stock Market in the 1990s." *Brookings Papers on Economic Activity*, 2000, Vol. 2: 73-118.
- Hall, Robert. "Struggling to Understand the Stock Market." *American Economic Review* 91 (May 2001): 1-11. (Earlier version downloadable from his web site at: <http://www.stanford.edu/~rehall/>) [Read most of the paper lightly, but read carefully the sections that mention Yahoo and eBay.]
- Liebowitz, Stanley J. and Stephen Margolis. "Network Externality: An Uncommon Tragedy." *Journal of Economic Perspectives* 8, no. 2 (Spring 1994): 133-150.
- McCloskey, Donald. "Economical Writing." *Economic Inquiry* 23 (April 1985): 187-222. (HB21.W43)
- Ross, Jeanne. "E-Business at Delta Air Lines: Extracting Value from a Multi-Faceted Approach." MIT Sloan School of Management, Center for Information Systems Research, Working Paper, No. 317 (August 2001).

Schumpeter, Joseph. Selected passages from: *Capitalism, Socialism and Democracy*. Harper-Collins, 1984.

Shapiro, Carl and Hal R. Varian. Selected passages from: *Information Rules: A Strategic Guide to the Network Economy*. Boston: Harvard Business School Press, 1999.

Tufte, Edward R. *The Visual Display of Quantitative Information*. Cheshire, Conn.: Graphics Press, 1983, pp. 13-15, 53-54, 93-96, 107-110.

### **ECON 4700 Course Requirements:**

Course grades will depend on the grades received on a midterm (100 points), a final exam (110 points), a medium-length critical review (100 points) of a book related to eBusiness, and a seven minute presentation (20 points) based on the critical review. The midterm will consist of a combination of multiple choice questions and essay questions.

The review should be 8-10 pages of double-spaced, typewritten text (not including any footnotes and references). The review should summarize the substantive content of the book, stating the main themes or theses in each major section. The review should state the intended audience for the book, the clarity of the writing style, and the accuracy and usefulness of the information and analysis in the book. The student should do a thorough search for other published reviews of the book, and should summarize these reviews in her own critical review. A bibliography at the end of the review should include a full bibliographic citation to the book under review, as well as citations to any published reviews that are mentioned in the critical review. The correct form for the bibliography is provided later in this syllabus. Most of the guidelines in the syllabus section "Guidelines for Term Papers" also applies to the critical reviews. However, unlike the graduate term papers, the critical reviews do not need an abstract, do not require a literature search in Ingenta (formerly "UnCover") and other literature search databases, and do not require a "thesis."

*The critical review should be submitted in paper form and also in digital form in Diamond's digital drop box in BlackBoard. Please name the file with an abbreviated title of your book. The review, with due attribution to you as the author, will be posted either to BlackBoard or to Diamond's web site (or both) for future students to read and study.*

Undergraduates will be graded on a more favorable scale than graduate students (see below).

### **ECON/BSAD 8706 Course Requirements:**

Course grades will depend on the grades received on a midterm (100 points), a 12 minute class presentation (30 points), an extended research paper (130 points) on a thesis related to one of the topics covered on the reading list, and a final exam (70 points).

Each graduate student will research a paper/presentation, either on some general question of the economics of technology/eBusiness; or else a paper/presentation on an eBusiness firm.

(Generally, I would expect most BSAD 8606 students to select an eBusiness firm for study, though this is not required.)

***Papers/Presentations on a General Question of the Economics of Technology/eBusiness***

These papers would generally consist of collection, and effective organization, and analysis of evidence from the research literature on some useful or interesting issue of the economics of technology/ebusiness relevant to the course. The student will prepare a term paper of 14-16 pages of double-spaced, typewritten text (not including any footnotes and references). Students are encouraged to come up with topics that interest them, but are also encouraged to run the topics by the instructor for advice on the topic's tractability.

Some sample possible topics are listed below:

1. What is the current evidence and argument about Schumpeter's claim that technological innovations come in long waves?
2. What is the current evidence and argument about the claim often attributed to Schumpeter that large firms are generally better able to successfully innovate than small firms?
3. What is the evidence, discussed by Brynjolfsson and others, for the growing importance of small firms in the U.S. economy? Is Milton Friedman correct that this evidence has been misinterpreted? (Probably this question would be easier for someone with some comfort level with econometric issues.)
4. What is Schumpeter's "central message" as measured by the references to Schumpeter in searchable books on Amazon.com?
5. Has Schumpeter's view of creative destruction and dynamic competition filtered down to the "core" of economics as reflected in the content of principles of economics, and higher level texts?
6. What have been the critical responses, extensions and applications of Christensen's extension of the Schumpeterian account of innovation?
7. Has the Schumpeterian account of creative destruction been the basis for defense arguments in antitrust cases; or discussed in legal rulings?
8. Should internet sales be exempt from sales taxes?

***Papers/Presentations on an eBusiness***

Students working on an eBusiness may select their own eBusiness, or may select an eBusiness company from the list below provided by the instructor. The student will prepare a term paper of 14-16 pages of double-spaced, typewritten text (not including any footnotes and references) on the company that provides information on:

- The firm's history.
- The firm's business model.
- The economic plausibility of the firm's business model.
- The value over time of the firm's stock, revenue, and profits.
- The firm's future prospects for profitability.

- The analysis of the firm by “experts” in the press and elsewhere.

Experts can include, but should not be limited to, the stock sector analysts of the major investment firms. Academic experts and reputable journalists should be given greater emphasis due to the frequent conflicts of interest among investment firm analysts.

Sources that will be searched for relevant information include the main eBusiness journal: *Business 2.0*. Students will also be taught how to find relevant information from Lexis-Nexis, and from the Yahoo Finance web site.

Among the companies that might be studied are those below. (Asterisked companies have been added to the list more recently.)

\*Ask Jeeves (listed as “projecting higher operating profits” in *World-Herald*, 2/2/03, p. 2D)

Avistar Communications (AVSR); Gilder likes in 9/02 Report.

Bizrate

BlueArc (data storage; Gilder likes; *N.Y.T.*, 3/27/01, c4; *WSJ*, 3/12/01, B1)

ContentGuard (digital rights company spun off of Xerox PARC; see: *Technology Review* Jan./Feb. 2001, p. 101)

Digital Fountain (praised by Gilder)

DoubleClick

Epinions

\*FindWhat.com (listed as a publicly traded internet “money maker” in *World-Herald*, 2/2/03, p. 2D)

ForSaleByOwner.com

Hotwire (competitor to Priceline: *WSJ*, 8/28/02, p. D2)

Infinera (1<sup>st</sup> integrated photonic circuit; *Red Herring*, 4/2002, pp. 41-44)

\*InfoSpace, Inc. (listed as good chance for profits soon in *World-Herald*, 2/2/03, p. 2D)

Kazaa (a Napster replacement)

Listen.com (praised by Gilder)

\*LivePerson, Inc. (manages online chat sessions for companies like eBay and Microsoft; *NYT*, 4/23/03, p. C10)

\*LookSmart (listed as “projecting higher operating profits” in *World-Herald*, 2/2/03, p. 2D)

\*MarketWatch (listed as “projecting higher operating profits” in *World-Herald*, 2/2/03, p. 2D)

MySimon

\*Netflix, Inc. (see: *Business 2.0* July 2003, pp. 41-43; listed as good chance for profits soon in *World-Herald*, 2/2/03, p. 2D)

\*Overstock.com (listed as good chance for profits soon in *World-Herald*, 2/2/03, p. 2D)

\*Overture Services, Inc. (listed as a publicly traded internet “money maker” in *World-Herald*, 2/2/03, p. 2D)

\*Quill.com

\*Quixtar.com

SyncIt

\*Tropos Networks, Inc. (deploying wi-fi systems; *NYT*, 5/21/03, p. C3)

\*USA Interactive (Barry Diller's growing set of online companies, including Citysearch,  
*NYT* 3/10/03, p C6)

WorldStreet (peer-to-peer; *WSJ* 7/5/01, B6)

Also: Any of the companies that Gilder discusses in his appendix entitled "Nine Stars of the Telecosm" in his *Telecosm*, except for JDS Uniphase and Broadcon, which have been done recently in a previous class.

Other companies may be chosen whose business substantially consists of some form of eBusiness, or the infrastructure of eBusiness. It usually is not a good idea to choose an eBusiness unit of a much-larger company, because it often is difficult to measure how much of the success/failure of the general firm is due to the eBusiness unit. For a similar reason of availability of good financial data, it usually is a good idea to choose a company that is publicly traded. No company that was reported on by a student in previous years, should be chosen (see BlackBoard for previous presentations).

The term review should be submitted both in paper form, and in digital form on disk or as an email attachment. *The term paper should be submitted in paper form and also in digital form in Diamond's digital drop box in BlackBoard. Please name the file with the name of your company. The paper, with due attribution to you as the author, will be posted either to BlackBoard or to Diamond's web site (or both) for future students to read and study.*

In addition to the paper, in the second half of the course each graduate student will give a 12 minute presentation on her company, followed by about 5 minutes of questions from the class, and class discussion.

### **BlackBoard:**

Much information concerning the course will be posted to the web pages of BlackBoard which has a URL of: <https://myuno.unomaha.edu/>. For example, PowerPoint slides that accompany class lectures will generally be posted to BlackBoard. Test grades will also be posted there. Announcements pertaining to the class will either appear on BlackBoard or be sent out via Notes email through BlackBoard.

The following table provides the **graduate** student grading scale in terms of percentages, and total points in the course:



Grades	Percentages	Points
A+	95-100	313-330
A	90-94	297-312
A-	85-89	280-296
B+	82-84	270-279
B	78-81	257-269
B-	75-77	247-256
C+	72-74	237-246
C	68-71	224-236
C-	65-67	214-223
D+	62-64	204-213
D	58-61	191-203
D-	55-57	181-190
F	54 or less	180 or less

The following table provides the **undergraduate** student grading scale in terms of percentages, and total points in the course:

Grades	Percentages	Points
A +	93-100	306-330
A	88-92	290-305
A-	83-87	273-289
B +	80-82	264-272
B	76-79	250-263
B-	73-75	240-249
C +	70-72	231-239
C	66-69	217-230
C-	63-65	207-216
D +	60-62	198-206
D	56-59	184-197
D-	53-55	174-183
F	52 or less	173 or less

### **Course Grade Reporting:**

In a memo dated February 5, 2001, Vice Chancellor Derek Hodgson has advised faculty that posting grades may be a violation of the "Privacy Rights of Parents and Students Act" of 1974. **Grades will not be posted.** A student who needs early reporting of the course grade at the end of the semester should provide the instructor with a stamped, self-addressed envelope. A student who needs early reporting of the course grade may obtain the grade through eBRUNO on the Registrar's World Wide Web home page.

### **Cheating:**

Exams will be attentively monitored. The result of academic dishonesty will be a grade of F for the seminar and a recommendation for expulsion from the university.

**Plagiarism:**

Copying the work of others without attribution is a form of intellectual theft known as plagiarism, and is a major offense among scholars (and other civilized people).

Most clearly, any material that is directly quoted, should appear within quotation marks, if a sentence or less, or indicated with a 'block indent' if more than a sentence (which means that the whole quote is indented 5 spaces from the left edge of the text). **Failure to use either quotation marks, or block indent, with direct quotations will result in zero points for the assignment.**

When a source is used in the text, internal references should be given in the text that consist of a parenthetical mention of the author's last name, the date of the publication and a specific page number (if appropriate). For each brief parenthetical reference, a complete bibliographic reference should be provided in the Bibliography.

**"Honors Contract" for Undergraduate Honors Students:**

Undergraduate students enrolled in the Honors Program, may receive honors credit for the course by completing an honors contract and fulfilling the terms of the contract. The contract will specify conditions identical to the graduate requirements for the course (viz., a presentation and a longer term paper).

**Partial, Tentative Outline of Readings Assignments:**

Some of the special value of a special topics seminar is that we can be especially responsive to the special and evolving interests of the students and professor; and can include the latest breaking research on the topics studied. As a result, the following schedule is very tentative and will be modified and expanded as the semester progresses. For example, I would like to try to schedule a visit from some local business person active in some aspect of eBusiness.

Readings with an asterisk (\*) in front of them will be discussed in class, but are not "required."

1. 1/13/04 Description of course; general background on technology and eBusiness; review of the standard account of competition.
2. 1/20/04 Research tools in economics of eBusiness; how to write clearly; some early economics of eBusiness.

McCloskey on writing clearly

Tufte on clear graphing

Shapiro and Varian, 1<sup>st</sup> chapter of *Information Rules*

3. 1/27/04 Schumpeter  
  
Schumpeter, on capitalism  
Cox and Alm on churn  
Foster & Kaplan, summary on creative destruction;  
Andy Grove, *Only the Paranoid Survive*
  
4. 2/3/04 MBA Leadership Speaker (5:30 – 7:00 PM) All invited to attend!  
**Class starts at 7:05 PM**  
  
Christensen & Raynor, *The Innovator's Solution*, Chapters 1 & 2.
  
5. 2/10/04 Christensen & Raynor, *The Innovator's Solution*, Chapters 3-6. **(Tentative term paper topics due.)**
  
6. 2/17/04 Christensen & Raynor, *The Innovator's Solution*, Chapters 7-10 & epilogue.
  
7. 2/24/04 The “New Economy”: Historical Precedents  
  
David, Paul A. on Dynamo  
Gordon  
DeLong Montreal speech
  
8. 3/2/04 Does eBusiness Benefit the Consumer (a.k.a. Make the **Market More Efficient**): Prices, Information, and Variety of Products **(for graduate students: initial bibliography due, in format that will be used in term paper.)**  
  
Gates from *The Road Ahead*.  
Brynjolfsson and Smith on friction-less market.  
[Brynjolfsson](#), Smith, and Hu. [Consumer Surplus](#).  
\*DeLong and Froomkin.
  
9. 3/9/04 **Midterm exam.** (Exam will cover assignments through 3/2/04.).

10. 3/16/04      **Spring Break (no class).**
11. 3/23/04      Does eBusiness Make **Firms** More Efficient: Marketing, Forecasting, Inventory/Production, Human Resources; Decentralization
- Bill Gates, *Business @ the Speed of Thought*  
 Brynjolfsson and Hitt on changes in business practices.  
 Baily on firm productivity (AEA 2003 notes)  
 Cummins and Violante on the technological gap  
 \*Jeanne Ross paper on eBusiness at Delta  
 \*Brynjolfsson on matrix of change
12. 3/30/04      Does eBusiness Benefit the Worker, and the Small Firm?
- Brynjolfsson, Malone, Gurbaxani, and Kambil paper on firm size.  
 Bresnahan, Brynjolfsson, and Hitt article on skilled labor.
13. 4/6/04      The Economics of Infrastructure and Bandwidth
- Gilder, *Telecosm*.  
 Christensen, Anthony and Roth on telecommunications predictions. (Read pp. 1-17 and skim the rest. In the part skimmed, focus on which of the technologies examined, appears to the authors to most likely be a disruptive technology.)
14. 4/13/04      The “New Economy”: Recent Analyses of Impact on Business and Economic Growth
- Farrell.  
 DeLong & Summers.  
 Feldstein.  
 \*Hall on valuation of dot.com stocks.
15. 4/20/04      *Student Presentations/Discussions.*
16. 4/27/04      *Student Presentations/Discussions*; summing up; review. **Papers due.**

17. 5/4/04 **Final Exam.** (Exam is comprehensive and may cover anything covered in course.)

**Last Year's Student Presentation Topics**

McTaggart, Joe. "United Online"

Smith, Amy. "Broadcom"

Olson, Paul. "Tivo"

Mahlangeni-Byndon, Xolani. "Cassidy, John. dot.con: The Greatest Story Ever Told."

Mak, Tin. "Getty Images, Inc."

Jarrett (Flanagan), Kathleen A. "travelzoo.com"

O'Neil, Sandy. "CyberGuard"

Vanourney, Kevin J. "AUDIBLE INC."

Powers, Tami. "Liebowitz, Stan J. "Re-Thinking the Network Economy."

Lundt, Matt. "RealNetworks"

Bagley, Mike. "JDS Uniphase"

Adam, Kristal G. "drugstore.com"

Vaughan, David. "Avistar"

Fjeldahl Cindy. "hotels.com"

Horton, Brian. "Cisco"

Tefft, Tim. "Charles Schwab"

**Presentations**

Presentations should make use of PowerPoint slides. PowerPoint will not be taught during the class, but the instructor can guide the student toward resources, that will help the student to learn the basics of PowerPoint.

### **Guidelines for Term Papers**

Late papers will be accepted, but will have 5% of the possible paper points deducted initially and an additional 1% deducted for each day the paper is late beyond the first day (so, e.g., if a paper is five days late, 9% of the possible paper points will be deducted). Late papers may result in a grade of I (incomplete) for the course on the initial grade report.

The paper should be written at a consistent level of difficulty. In most cases, the paper should be written to be understandable by a conscientious undergraduate economics major. That means you should assume that you are writing for someone who is intelligent, interested, short on time, and does not have a deep knowledge of science or the higher level technical details of economics.

The paper should have a title page including the title, your name, the name of the course, the course number and the date on which the paper is turned in. Following the title page, on a separate page should be a 100 word abstract. Neither the title page nor the abstract page counts toward the page limit of the paper. Pages in the body of the text (beginning with the Introduction) should be consecutively numbered. The whole paper should be double-spaced and should have inch and a half margins on the top, bottom, right and left. The font size should either be 10 point or 12 point in size. Any quotations longer than one sentence should be presented in “block indent” form (meaning that the whole quote is indented 5 spaces from the left edge of the text). Please do not put your paper in a special binder that would limit the space for my comments. Instead, staple or clip it together.

Use endnotes rather than footnotes. (But endnotes should be used only if really necessary.)

When a source is used in the text, internal references should be given in the text that consist of a parenthetical mention of the author's last name, the date of the publication and a specific page number (if appropriate). For each brief parenthetical reference, a complete bibliographic reference should be provided in the Bibliography (that is not counted in the page limit). The ultimate arbiter for reference format is style “A” described in the latest edition of *The Chicago Manual of Style*.

Before you turn in your final draft, be sure to submit it to a spell-checking program (available with all major word-processing programs).

As you work on the text of your paper, be sure to periodically backup your latest draft onto a floppy disk. Also be sure to keep a clean copy of your paper for your files---the copy you turn in to me will be marked-up in red ink.

In your introduction, you should describe your problem and your thesis. This might be a good place to mention the contents of any broadly relevant articles that you turned up in your Ingenta, EconLit and other literature searches. If there is no relevant material on Ingenta or EconLit for your topic, mention the absence of relevant material (and include in the appendix, a list of the keywords that you used to search under and the articles that resulted). (That is, it would be very unusual to have no relevant articles appear, so if you claim that there are none, the burden

of proof is on you.) Briefly (in a few sentences) summarize what you will be doing in the rest of the paper.

**SOME SPECIFIC REQUIREMENTS:**

- a. The paper should have inch and a half margins on the left hand side, top and bottom. (Ample margins make it easier for me to jot down comments.)
- b. The style for references should follow the sample form provided on p. 12 of this syllabus. It should be consistent and should provide enough information for the reader to track down a reference, if necessary. Perhaps the most widely used style format in economics is that found in: *The Chicago Manual of Style*, latest edition, The University of Chicago Press.) Of the two “basic” styles the *Manual* discusses, the one used in economics is a variant of what is called style “A.”
- c. Attempt to write as McCloskey suggests in "Economical Writing".
- d. Do not place your paper in a plastic cover or other binder.
- e. Make a photocopy of your paper before turning it in.
- f. The paper is due at the beginning of class on the last day of classes.

**Sample Form for Bibliographic References**

The following sample bibliography is intended to illustrate the mandated reference format for several different kinds of publications. The last entry is for a web resource, and gives an example where a lot of information is available---you may not always be able to provide quite as much detail, but should provide what you can. (The Jones entry is fictitious, and is adapted from: <http://www.lib.ohio-state.edu/guides/chicagogd.html>)

Ackermann, Robert John. *Data, Instruments and Theory*. Princeton, N.J.: Princeton University Press, 1985.



Acs, Zoltan J., David B. Audretsch and Maryann P. Feldman. "Real Effects of Academic Research: Comment." *The American Economic Review* 82, no. 1 (March 1992): 363-367.

Adams, James D. "Fundamental Stocks of Knowledge and Productivity Growth." *Journal of Political Economy* 98, no. 4 (August 1990): 673-702.

Alchian, Armen A. "Private Property and the Relative Cost of Tenure." In *Economic Forces at Work*. Indianapolis: Liberty Press, 1977 (essay originally published in 1958).

American Chemical Society. *Directory of Graduate Research 1989*. Washington, D.C.: American Chemical Society, 1989.

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**Important Dates:**

Mar. 9: midterm exam (tentative date).

Mar. 13 - 21: Spring break; no classes.

Apr. 2: Last day to drop course with a grade of "W".

May 4: Final exam 6:00 - 8:40 PM.