LONG SIGNATURE SHEET

UNC CHARLOTTE

Proposal Number: ECON - 02-03-12

Proposal Title Establishment of an option within the Economics concentration of the MS Economics Degree

Originating Department Economics

TYPE OF PROPOSAL: UNDERGRADUATE_____ GRADUATE ✓ UNDERGRADUATE & GRADUATE____
(Separate proposals sent to UCCC and Grad. Council)

DATE RECEIVED	DATE CONSIDERED	DATE FORWARDED	ACTION	SIGNATURES
1/9/2012	2/3/2012	3/16/2012	Approved	DEPARTMENT CHAIR [print name here] Jennifer Troyer
2/19/2012	2/19/2012	4/9/2012	Approved	COLLEGE CURRICULUM COMMITTEE CHAIR Print name: LLOYD BLENMAN
			Approved	COLLEGE FACULTY CHAIR N.A. Print name:
4/11/2012	4/18/2012	4/23/2012	Approved	COLLEGE DEAN Print name here if signing on behalf of Dean:
			Approved	UNDERGRADUATE COURSE & CURRICULUM COMMITTEE CHAIR (for undergraduate courses)
4-23-12	5-1-12	5-2-12	Approved	GRADUATE COUNCIL CHAIR (for graduate courses) Rob Roy McGregor
			Approved	FACULTY GOVERNANCE SECRETARY (noting Faculty Council approval on Consent Calendar)
				FACULTY EXECUTIVE COMMITTEE (if decision is appealed)

Revised 10/20/10
OAA/cag

University of North Carolina at Charlotte

New Graduate Proposal

Course and curriculum proposal from: Economics

Establishment of an option within the Economics concentration of the MS Economics Degree and the addition of four new graduate courses

II. Contents of Proposal

A. Proposal Summary and Catalog Copy
1. Summary
The Economics Department proposes to add one option within the Economics concentration of the MS Economics degree. The Department of Economics also proposes to add four new graduate courses to the MS Economics degree. The four courses are: Advanced Microeconometrics (ECON 6217), Public Economics (ECON 6256), Applied Computational Economics (ECON 6257), and Economics of Health and Health Care (ECON 6260).
2. Catalog Copy
Concentrations
1) Economics

The purpose of the Economics Concentration is to provide students with the opportunity to acquire specialized skills related to their areas of interest and expertise. Two options are available in this concentration: (A.) the Quantitative Methods in Economics Option and (B.) the Individualized Study Option.

A. Quantitative Methods in Economics Option
The Quantitative Methods in Economics Option is designed for students who want to study quantitative methods in detail. It is an ideal option for those students interested in applying quantitative modeling and methods for economic analysis in their chosen field or pursuing an Economics Ph.D. after completion of the M.S. in Economics program. This option can be completed in one and a half years of study.

Students in this option must complete the core curriculum for the M.S. in Economics and the thesis or research project. In addition, they must complete:

ECON 6217: Advanced Microeconometrics
ECON 6219: Financial Econometrics

And two of the following:

ECON 6203: Financial Economic Theory
ECON 6206: Game Theory and Experiments
ECON 6235: Monetary and Financial Theory
ECON 6257: Applied Computational Economics
      OR a combination of the above courses and approved electives that total 6 credit hours

B. Individualized Study Option
The Individualized Study Option is designed for students who wish to pursue a specialized course of study. This option can be completed in one full year of study if the student chooses the thesis option.

Students in this option must complete the core curriculum for the M.S. in Economics and the thesis or research project. In addition, they must complete 12 hours of electives chosen from the fields of macroeconomics and monetary policy, finance and banking, environmental economics, international trade and international finance, economic modeling and simulation, urban economics, public finance and cost/benefit analysis, or economic and business forecasting. The program also permits the development of individualized specializations in areas that are complementary to economic theory and analysis.

Proposed New Courses
ECON 6217. Advanced Microeconometrics (3) Prerequisites: ECON 6112 or ECON 6113. The focus is on underlying assumptions regarding the population, specification, estimation, and testing of microeconometric models. Students will become acquainted with a variety of extensions of conventional linear models for cross-sectional and panel data, including but not limited to the following: panel data models, instrumental variables models, and qualitative response models. (Annually)

ECON 6256. Public Economics. (3) Prerequisite: MATH 1241 (or equivalent) and permission of the program coordinator. Public economics is the study of the way governments choose spending, taxation, and regulatory policy; the ways such policies may affect economic welfare; and mechanisms to evaluate the economic effects of such policies. (Annually)

ECON 6257. Applied Computational Economics. (3) Prerequisites: ECON 6201 and ECON 6202 or permission of the program coordinator. This course introduces computational approaches for solving economic models. Topics include: interpolation and approximation techniques, numerical optimization, numerical solutions to systems of nonlinear equations, quadrature formulas for numerical integration, Monte Carlo simulation, and basic solution algorithms for economic dynamics. (On Demand)

ECON 6260. Economics of Health and Health Care. (3) Cross-listed as PPOL 8667 and HSRD 8004. Prerequisite: Admission to graduate program or permission of the instructor. This course will use economic theory and econometrics to analyze the functioning of the health care sector and appropriate public policy. Topics will include: how markets for medical care differ from other markets, the demand for medical care, the demand and supply of health insurance, the role of competition in medical markets, managed care, managed competition, and the role of the public sector in regulating and financing health care. The topic list is flexible and student input will be solicited and welcomed. (Alternate Fall)

B. Justification

1. As currently structured the MS Economics program has two concentrations, Economics and Economics/Finance. The two options (Quantitative Finance and Financial Management) in the Economics/Finance concentration contain a list of courses that students must take in order to complete the specified option. The Economics concentration has no such structure and instead consists of the student choosing his/her own course of study from elective classes. While this option would still be available under the Economics concentration, we propose one new option be added, Quantitative Methods in Economics. This new option would help to publicize where the Economics department's strengths lie and attract students with compatible interests. Also, it would make it clearer to students what possible paths there are if they choose the Economics concentration.

We also propose adding four new courses to the course catalog.

ECON 6217: Advanced Microeconometrics fills a gap in our existing econometrics courses. Given the increasing number of econometric techniques used to analyze data, one course in econometrics is insufficient. Advanced Microeconometrics would provide a rigorous discussion of binary choice models, panel data, simultaneous equations, and other topics that cannot be covered in the courses currently offered due to time constraints. These are important topics to discuss given the complexity of data sets available today.

ECON 6256: Public Economics fills a gap in our current course listings. This course will serve as an introduction to the fundamentals of government project evaluation. As students seek to fill positions in the public sector and research centers that work with those in the public sector, the topics discussed and tools developed in this course will benefit those students.

ECON 6257: Applied Computational Economics fills a gap in our current course listings. Most of our theoretical courses focus on solving problems

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that are static in nature. However, students may encounter dynamic problems. This course would teach students the mathematics and computational skills needed to solve dynamic problems.

ECON 6260: Economics of Health and Health Care was offered as ECON 6090 for the first time in Fall 2011 as a cross-listing with PPOL 8667 and HSRD 8004. HSRD 8004 is a required course for students in the Ph.D. program in Health Services Research. PPOL 8667 is a required course for students in the Health Policy concentration in the Ph.D. program in Public Policy. HSRD 8004/PPOL 8667 is currently being offered on an alternate year basis in the Fall.

2. Co/pre reqs: Prerequisite for ECON 6217, Advanced Microeconometrics: ECON 6112 or ECON 6113. Prerequisite for ECON 6256: MATH 1241 (or equivalent) and permission of the program coordinator. Prerequisites for ECON 6257: ECON 6201 and ECON 6202 or permission of the program coordinator. Prerequisite for ECON 6260: Admission to graduate program or permission of the instructor.

3. The 6000 level designations are consistent with courses that are approved for graduate credit. Restricted to graduate students.

4. The proposal provides students with a more focused plan of study should they choose the Economics Concentration in the M.S. Economics program. By providing paths through which each option within the Economics Concentration can be achieved, the structure of the Economics Concentration is now parallel to that of the Economics/Finance Concentration. Also, this will provide students with a better sense of which elective courses will be offered regularly, which should lead to a composition of students which better reflects the strength of the Economics Department. Additionally, the goal is to better market the strengths of the Economics Department faculty and the M.S. Economics program in order to increase enrollment.

C. Impact

1. These courses will serve all students in the M.S. Economics program. They will also be open to students in the M.S. in Math Finance and graduate students in Finance, Mathematics, and Statistics. They may also serve students in the Ph.D. programs in Public Policy and Geography.

2. What effect will this proposal have on existing courses and curricula?
   a. ECON 6217 (Advanced Microeconometrics) and ECON 6256 (Public Economics) would be offered yearly. ECON 6260 (Economics of Health and Health Care) is offered in alternate fall

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semesters. ECON 6257 (Applied Computational Economics) would be taught no more than once per year.

b. The content and frequency of other courses currently being offered will not be altered.

c. The anticipated enrollment for each course is at least 10 students.

d. These new courses will draw some students from other elective courses currently being offered. However, enrollment in these other elective courses should still exceed the minimum enrollment needed as M.S. in Economics students would likely substitute the proposed courses for courses in other disciplines such the M.S. Mathematical Finance or MBA programs.

e. Only one of these courses, ECON 6260, has been taught under special topics numbers. It was offered in Fall 2011.

f. With the exception of ECON 6260, only the listing of Economics graduate courses will be affected. ECON 6260 was offered in Fall 2011 as a special topics course (ECON 6090) and crosslisted with HSRD 8004 and PPOL 8667, which has been successful. The total enrollment in the section (including all three course numbers) was 21, with 10 enrolled in HSRD 8004, 3 in PPOL 8667, and 8 in ECON 6090.

III. Resources Required to Support Proposal

A. Personnel
No new faculty lines are required to offer the courses.
Current graduate faculty members who are qualified to teach the courses are as follows:

        ECON 6217 (Advanced Microeconometrics) – Troyer, Depken, Billings
        ECON 6256 (Public Economics) – Russo, Depken, Billings, Schwarz
        ECON 6257 (Applied Computational Economics) – Lin
        ECON 6260 (Economics of Health and Health Care): Troyer

B. Physical Facility
The current facilities are adequate.

C. Equipment and Supplies
Current equipment and supplies are adequate.

D. Computer
Current computer resources are adequate.

E. Audio-visual
Current audio-visual resources are adequate.

F. Other resources
N/A

G. Sources of funding
   N/A

IV. Consultation with the library and other departments or units

   A. Library Consultation
      The J. Murray Atkins Library was consulted regarding general adequacy in the proposed new courses of ECON 6217 (Advanced Microeconometrics), ECON 6256 (Public Economics), and ECON 6257 (Applied Computational Economics). ECON 6260 (Economics of Health and Health Care) is being cross-listed with an existing course, where holdings were deemed adequate when the original course was established. For ECON 6256 and ECON 6257 the holdings were deemed to be adequate. For ECON 6217 the holdings were deemed to be adequate if additional purchases (texts) were made. On December 12, 2011, at Ms. Kim Wu's request, Jennifer Troyer recommended 5 books for purchase by the library for ECON 6217 for purchase in Spring 2012:
      - Microeconometrics Using Stata by A. Colin Cameron and Pravin K. Trivedi (in holdings as of 4/4/2012)
      - Analysis of panel data by Cheng Hsiao (in holdings as of 4/4/2012)
      - Microeconometrics: Methods and Applications by A. Colin Cameron and Pravin K. Trivedi (on order as of 4/4/2012)
      - Panel Data Econometrics by Manuel Arellano (not in holdings or ordered as of 4/4/2012)
      - Panel Data: Theory and Applications by Badi H. Baltagi (not in holdings or ordered as of 4/4/2012).

   B. Consultation with other Departments
      We have consulted with the Health Services Research PhD for ECON 6260. We have consulted the Department of Mathematics and Statistics regarding ECON 6257.

V. Initiation, Attachments, and Consideration of the Proposal

   A. Originating unit: Economics, The Belk College of Business, UNC Charlotte
      All voting economics faculty members present at the Economics Department meeting on February 3rd, 2012 voted in favor of the proposal.

   B. Attachments
      1. Consultation – Library and Departmental consultations are attached.
      2. Course outline: These are graduate courses, none attached.
      3. Syllabi: There are four syllabi attached.
      4. There are no changes to any Academic Plan of Study.

Consultation on Library Holdings

To: Dr. Jennifer Troyer

From: Somaly Kim Wu

Date: November 29, 2011

Subject: ECON 6257: Applied Computational Economics

Summary of Librarian's Evaluation of Holdings:

Evaluator: _____Somaly Kim Wu_____ **Date:** November 29, 2011

Please Check One:
Holdings are superior _____
Holdings are adequate _X__
Holdings are adequate only if Dept. purchases additional items. _____
Holdings are inadequate _____

Comments:

Library holdings are adequate for a course on "Applied Computational Economics." The library's print collection covers a variety of economic topics such as computational economics, economic theory, macro and micro economics and much more. The library also has access to a number of full-text electronic resources including Business Source Premier, LexisNexis, Emerald Management Review and EconLit.

The library has subscriptions to several print and electronic journals in this subject area. These include Computational Economics, Computational Statistics & Data Analysis, the Journal of Applied Econometrics, American Economist, and the Journal of Econometrics.

Overall, Atkins Library has adequate resources to support the proposed course. Journal articles and books that are not held by the library can be obtained through Interlibrary Loan. I would suggest buying monographs as funds permit to keep the collection current. Otherwise, the collection is adequate.

Evaluator's Signature

November 29, 2011
Date

UNC CHARLOTTE

J. Murrey Atkins Library

Consultation on Library Holdings

To: Dr. Jennifer Troyer

From: Somaly Kim Wu

Date: November 29, 2011

Subject: ECON 6217: Advanced Microeconometrics

Summary of Librarian's Evaluation of Holdings:

Evaluator: ___Somaly Kim Wu___ **Date:** November 29, 2011

Please Check One:
Holdings are superior _____
Holdings are adequate _____
Holdings are adequate only if Dept. purchases additional items. _X___
Holdings are inadequate _____

Comments:

Library holdings are adequate if department purchases additional items for a course on "Advanced Microeconometrics." Current library holdings are limited in the area of Econometrics and Microeconometrics.

To supplement the print holdings the library also has access to a number of full-text electronic resources including Business Source Premier, LexisNexis, Emerald Management Review and EconLit.

The library has subscriptions to several print and electronic journals in this subject area. These include the Harvard Business Review, the Journal of Socio-Economics, American Economist, and the Journal of Econometrics.

Overall, Atkins Library has adequate resources to support the proposed course. Journal articles and books that are not held by the library can be obtained through Interlibrary Loan. I would suggest buying monographs as funds permit to keep the collection current. Otherwise, the collection is adequate.

_____
Evaluator's Signature

__November 29, 2011__
Date

UNC CHARLOTTE
J. Murrey Atkins Library

Consultation on Library Holdings

To: Dr. Jennifer Troyer

From: Somaly Kim Wu

Date: December 1, 2011

Subject: ECON 6256: Public Economics

Summary of Librarian's Evaluation of Holdings:

Evaluator: __Somaly Kim Wu__   Date: __December 1, 2011__

Please Check One:
Holdings are superior   _____
Holdings are adequate   _X___
Holdings are adequate only if Dept. purchases additional items. _____
Holdings are inadequate   _____

Comments:

Library holdings are adequate for a course on "Public Economics." The library's print collection covers a variety of economic topics such as economic systems, economic theory, macro and micro economics and much more. The library also has access to a number of full-text electronic resources including Business Source Premier, LexisNexis, Emerald Management Review and EconLit.

The library has subscriptions to several print and electronic journals in this subject area. These include the Journal of Public Economic Theory, Game and Economic Behavior, the Quarterly Journal of Economics, and the Journal of Public Economics.

Overall, Atkins Library has adequate resources to support the proposed course. Journal articles and books that are not held by the library can be obtained through Interlibrary Loan. I would suggest buying monographs as funds permit to keep the collection current. Otherwise, the collection is adequate.

_____
Evaluator's Signature

__December 1, 2011__
Date

Troyer, Jennifer

Laura,

I agree about the expectations - please do let me know if you get any feedback from students that might point to problems in this area.

My experience this semester is that the Econ students have an easy time with the economic theory but struggle more with the institutional detail regarding the health care system. The opposite is true for the HSR students - they struggle more with the economic theory but have a pre-existing base of institutional detail to work with. Given that both groups have an aspect of the course that is particularly challenging, I think that it has worked well.

Thank you for your support of the cross-listing.

Regards-

Jennifer

Jennifer L. Troyer, Ph.D. | Associate Professor and Chair of Economics,
Adjunct Faculty Department of Public Health Sciences |
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From: Talbot, Laura
Sent: Friday, November 18, 2011 7:43 PM
To: Troyer, Jennifer
Subject: RE: HSRD 8004 cross-listing

Dear Jennifer,
This is a good idea b/c there is a commitment across disciplines to offer this course consistently. We need to be sure that we maintain the course expectations at the doctoral level.
Best,
Laura

Laura A. Talbot, EdD, PhD, RN, GCNS-BC
Professor | Dean Colvard Distinguished Professor in Nursing
Director, HSR PhD Program

From: Troyer, Jennifer
Sent: Thursday, November 17, 2011 3:19 PM
To: Talbot, Laura
Subject: HSRD 8004 cross-listing

Laura,

As you know, with your permission, we cross-listed HSRD 8004 this fall with ECON 6090 (a special topics course). The course ended up enrolling about 10 doctoral students (some from PPOL and GEOG but most from HSRD) and 10 MS in Economics students. The mix of students has worked well. I am attaching the current syllabus as a reminder.

I am writing to request that we formalize the cross-listing by creating a permanent 6000 level Economics course in health economics. To move ahead with the course establishment process, I am required to consult with key constituencies, of which the HSRD program is one.

Can you please provide me with a consultation on this issue?

Regards-

Jennifer

Jennifer L. Troyer, Ph.D. | Associate Professor and Chair of Economics,
Adjunct Faculty Department of Public Health Sciences |
UNC Charlotte | Belk College of Business
9201 University City Blvd. | Charlotte, NC 28223
Phone: 704-687-7599 | Fax: 704-687-6442
jtroyer@uncc.edu | http://belkcollegeofbusiness.uncc.edu/jtroyer/

Troyer, Jennifer

From:	Dow, Alan
Sent:	Thursday, April 05, 2012 3:02 PM
To:	Troyer, Jennifer
Subject:	RE: Proposed ECON 6257

Hello Jennifer

Thank you for consulting the department on your department's proposed course
ECON 6257 Applied Computational Economics.

It looks like an excellent course, the department has no objections to its approval,
and I can confirm that it does not have significant overlap with any single
Math or Stat course. Thus, as you request, I can confirm that this proposed
course is sufficiently different from current course offerings in Mathematics.

sincerely,
Alan Dow

From: Troyer, Jennifer
Sent: Wednesday, April 04, 2012 2:19 PM
To: Dow, Alan
Subject: Proposed ECON 6257

Alan,

I am writing to request a consultation from the Department of Mathematics and Statistics. The Department of
Economics is proposing a new course in Applied Computational Economics (ECON 6257). Please find the
syllabus attached. In particular, we would like to confirm that this course is sufficiently different from current
course offerings in Mathematics.

Thank you for your assistance with this.

Regards-

Jennifer

Jennifer L. Troyer, Ph.D. | Associate Professor and Chair of Economics,
Adjunct Faculty Department of Public Health Sciences |
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strictly prohibited. If you have received this transmission in error, please notify me immediately by reply e-mail or by telephone at 704-687-7599. Thank you.

ECON 6217: Advanced Microeconometrics

Text: The lectures will be based material from three texts and several articles. Readings for each class period are noted on the syllabus below, and information about additional articles will be given as the semester progresses.

1. Required: Wooldridge, Jeffrey, (2008). Introductory Econometrics: A Modern Approach, 4th edition, South-Western College Pub.
2. Recommended: Stock, James and Mark Watson, (2007). Introduction to Econometrics.
3. Recommended: Greene, William, (2008) Econometric Analysis, 6th Edition, Prentice Hall.

Software: I will support Stata for use in econometric estimation in this course, but you are welcome to use other software for estimation.

Course Description and Objectives: Prerequisite: ECON 6112 or ECON 6113. The focus is on underlying assumptions regarding the population, specification, estimation, and testing of microeconometric models. Students will become acquainted with a variety of extensions of conventional linear models for cross-sectional and panel data, including but not limited to the following: panel data models, instrumental variables models, and qualitative response models.

Grading: Your course grade will be determined by your performance on two in-class exams and a series of problem sets. These components, discussed below, will have the following weight in the calculation of your final grade:

Midterm Exam	**40%**
Final Exam	**40%**
Problem Sets	**20%**

Exams: Makeup tests are administered only for extreme situations such as illness, death in the family, etc.

Problem Sets: Problem sets will be distributed with one week notice of the due date. You may work together on the problem sets. However, any programming statemtents for the problems involving estimation must be unique to each individual. In other words, do no turn in code with the same naming of variables and comment statements as someone else in the class. These problem sets may not be made up. Your grade will be discounted by 10 percent of the maximum grade for each day that it is late, with the first deduction taken when the assignment is not handed in by the end of class on the due date. Assignments not handed in by the class in which the problem set is returned will receive a grade of zero.

Grading Scale: Letter grades will be based on the following scale (in percentage terms):
A   **90 and above**
B   **80-89.99**
C   **70-79.99**
U   **Below 70**

Communication: Communication with those outside of class while class is in progress is not acceptable. (In other words, turn off all communication devices prior to the start of class.) Students are expected to check their UNC Charlotte e-mail (username@uncc.edu) accounts weekly for correspondence regarding the course.

Statement on Diversity: The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

Attendance: Classroom attendance is strongly recommended.

Academic Integrity: Please note that academic misconduct (cheating) will **NOT** be tolerated. In addition, students have the responsibility to know and observe the requirements of The UNC Charlotte Code of Student Academic Integrity (Catalog, page 375). This code forbids cheating, fabrication or falsification of information, multiple submission of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. Academic evaluations in this course include a judgment that the student's work is free from academic dishonesty of any type; and grades in this course therefore should be and will be adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction of the course grade. In almost all cases, the course grade is reduced to U. Copies of the code can be obtained from the Dean of Students Office. Standards of academic integrity will be enforced in this course. Students are expected to report cases of academic dishonesty to the course instructor. In addition, the following rule regarding conduct applies:

Proposed Course Outline:

Week 1 and 2	Introduction, Conditional Expectations, and Basic Asymptotic Theory
Week 3 and 4	Single Equation Linear Model and OLS Estimation Review
Week 5 and 6	Instrumental Variables
Week 7 and 8	Systems of Equations and Simultaneous Equations Models
Midterm Exam	
Week 9 and 10	Panel Data
Weeks 11-13	Estimation by Maximum Likelihood, Discrete Response Models
Week 14 and 15	Estimating Average Treatment Effects and Sample Selection and Attrition
Final Exam	

PUBLIC ECONOMICS: ECON 6256

Syllabus

COURSE DESCRIPTION

Public economics is the study of the way governments choose spending, taxation, and regulatory policy; the ways such policies may affect economic welfare; and mechanisms to evaluate the economic effects of such policies. Prerequisites: MATH 1241 (or equivalent) and permission of the program coordinator. The course is taught annually for 3hours of graduate credit.

OBJECTIVES

This lecture course will cover many of the specific topics the *Journal of Public Economic Theory* lists as public economics fields, including the role of the government in the economic system, externalities and public goods, asymmetric information, equity, market failure, taxation, and regulation. The course introduces fundamentals of government project evaluation (cost-benefit/cost-effectiveness analysis). Major tools used include first order and comparative static methods, dynamic optimization, and general equilibrium analysis. Tools will be introduced as needed. However, strong facility with calculus is a pre-requisite. Students must demonstrate the ability to use these tools in a major research paper. Subject to time constraints and issues of topical interest, additional issues and methods may include local and club goods, the economics of education, the economics of health care, the distribution of income, social security systems, public choice, voting, mechanism design, hedonic measurement methods and wage valuation of public goods.

TEXT

Required: *Intermediate Public Economics*, by Jean Hinriks and Gareth D. Myles, Second edition, 2006, MIT Press.

For purchase at the student's discretion: *Solutions Manual*, by Hashimzade, Hindriks and Myles. The *Manual* provides answers to the end-of-chapter problems in the text.

GRADES

Course grades are based on a midterm exam (35%), a final exam (35%), and a research paper (30%).

Course letter grades are based on the % of total maximum points on all tests taken, and are assigned as follows:

89.5% & higher	= A
79.5%-89.49%	= B
69.5%-79.49%	= C
<69.5%	= U

OUTLINE of TOPICS

Section 1, Introduction

Section 2, Measurement and Size of Government Sectors

Section 3, Competition and Pareto Efficiency

Section 4, The Role of the Government

      A) Externalities and Public Goods
      B) Equity
      C) Market Failure

Section 5, Project Evaluation

      A) Cost-Benefit Analysis
      B) Cost Effectiveness Analysis

Section 6, Asymmetric Information

Section 7, The Economics of Taxation

      A) Commodity Taxation
      B) Income Taxation
      C) A Flat Tax?
      D) Taxes on Wealth and Real Property

Section 8, Social Security and Government Debt

Section 9, Fiscal Federalism

ATTENDANCE: students are expected to attend each class

Standards of Academic Integrity will be enforced. Students are responsible for observing the UNCC Code of Student Academic Integrity, which forbids cheating, fabrication or falsification of information, multiple submission of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. Academic evaluation in this course includes a judgment that student work is free of dishonesty. Grades will be adversely affected by academic dishonesty. Students who violate the Code can be expelled. The normal penalty for a first offense is zero credit on the work involving dishonesty and substantial reduction of the course grade. In almost all cases the course grade is reduced to F. Students are expected to report cases of academic dishonesty.

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

ECON 6257: Applied Computational Economics
Spring 2012
T, R, (TBA)
Friday xxx (TBA)

Course Description
This course introduces computational approaches for solving economic models. Topics include: interpolation and approximation techniques, numerical optimization, numerical solutions to systems of nonlinear equations, quadrature formulas for numerical integration, Monte Carlo simulation, and basic solution algorithms for economic dynamics. Graduate Credit (3). On Demand. Prerequisites: ECON 6201 & ECON 6202.

Course Objectives
The primary objective of the course is to teach how to compute equilibriums in economic models that cannot be solved analytically. It requires students to learn to formulate economic problems in computationally tractable forms, and use numerical analysis techniques to solve them. After this class a student should be able to formulate dynamic economic models, design solution algorithms, calibrate models, and perform simulations and policy experiments.

Instructional Method
The course is offered with classroom lectures. A wide range of numerical methods and their applications to economic models will be discussed. Students are required to learn computer programming to implement numerical methods to solve economic problems.

Computer Programming Language
Students will need to know some computational language. My suggestion is to learn Matlab or Octave or Python, particularly if you do not know a good computational language such as Fortran or C or C++. Matlab is a commercial language and expensive, while both Octave and Python are an open-source language. If you prefer to learn Matlab, you are actually encouraged to start from Octave, since Octave is almost the same as Matlab in syntax (that is, Matlab's m-files can run on Octave directly in almost all cases). If you prefer to learn Python, you will need to download Python+Numpy+Scipy+Matplotlib. If you work on a Windows system, it is convenient to obtain a full Python package by downloading Pythonxy (http://code.google.com/p/pythonxy/). If you work on a Unix or Mac system, you can obtain Python from http://python.org/, Numpy and Scipy from http://www.scipy.org/Download, and Matplotlib from http://matplotlib.sourceforge.net/. Please be advised that Python 2.xx is a preferred version. Students can use any of the three languages (Matlab, Octave, Python) for homework or project assignments. You can consult any one of many online tutorials. Do a google search for "matlab/octave tutorial" or "python tutorial."

Textbook
Miranda, M. & Fackler, P. (2002). *Applied Computational Economics and Finance*. MIT Press

Books on reserve
- Chiang, A. (1992). *Elements of Dynamic Optimization*. McGraw
- Dixit, A.K. (1990). *Optimization in Economic Theory*. 2nd Ed. Oxford University Press.
- Judd, K. (1998). *Numerical Methods in Economics*. MIT Press
- Kiusalaas, J. (2010). *Numerical Methods in Engineering with Python*. Cambridge University Press.
- Ljungqvist, L. and Sargent, T. (2004). *Recursive Macroeconomic Theory*. MIT Press.

- Miranda, M. & Fackler, P. (2002). *Applied Computational Economics and Finance*. MIT Press
- Stokey, N. & Lucas, R. (1989). *Recursive Methods in Economics Dynamics*. Harvard University Press

Lecture Outline
I. INTRODUCTION
 1. Introduction to Computational Economics
 2. Elementary Concepts of Numerical Analysis

II. BASICS FROM NUMERICAL ANALYSIS
 3. Linear Equations and Iterative Methods
 4. Non-linear Equations and Complementarity Problems
 5. Optimization
 6. Numerical Integration and Differentiation
 7. Function Approximation
 8. Monte Carlo Simulation

III. NUMERICAL METHODS FOR FUNCTIONAL PROBLEMS
 9. Finite-Difference Methods
 10. Projection Methods
 11. Dynamic Programming and Solution Algorithms:
  a. Backward Recursion
  b. Function Iteration
  c. Policy Iteration

IV. APPLICATIONS
 12. A Deterministic Neoclassical growth Model
 13. A Simple Stochastic Growth Model
 14. The Lucas Asset Pricing Model

Attendance:
Students are expected to attend every class on time and not to leave early. Please notice that in general there is an unambiguous positive relationship between class attendance and class performance (grades). If you miss classes, you will easily get lost in class and will tend to a lower semester grade in the end.

All cell phones and pagers must either be turned off before class begins or placed in silent mode.

While important announcements will be posted in the University's **Moodle** website (http://moodle.uncc.edu), you may still miss some class announcements in your absence. It is your responsibility to ask other students, rather than the instructor, for the class announcement you missed.

Grading Policy
1) The course grade is based on class participation, homework, and project. Class participation counts for 15%, homework 65%, and project 20%. There are no exams.
2) Course Grade: A = 90% or above, B = 80% - 89%, C = 70% - 79%, U = 70% below.
3) You must turn in your completed homework in the classroom as soon as the class begins on the due date. You will earn zero point from any overdue homework.

4) One project will be assigned at the beginning of the semester. The due date is the class day of the course. If your project cannot meet the due date, then one day delay will make you lose 20% of your score, two days delay will make you lose 40%, and so on.
5) Both homework and project are to be assigned online in the University's **Moodle** website (http://moodle.uncc.edu). You shall notice that while group discussions are welcome, your completed homework or project shall not simply be a duplicate of any other student's work. Should such things be found, both your homework/project score and the original author's will lose 50%.

Academic Integrity
Students have the responsibility to know and observe the requirements of The UNC Charlotte Code of Student Academic Integrity (Catalog, page 275). This code forbids cheating, fabrication or falsification of information, multiple submissions of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. Any special requirements or permission regarding academic integrity in this course will be stated by the instructor and are binding on the students. Academic evaluations in this course include a judgment that the student's work is free from academic dishonesty of any type; and grades in this course therefore should be and will be adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction of the course grade. In almost all cases, the course grade is reduced to F. Copies of the code can be obtained from the Dean of Students Office. Standards of academic integrity will be enforced in this course. Students are expected to report cases of academic dishonesty to the course instructor.

Statement on Diversity: The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

Course Number: ECON 6260 and HSRD 8004 and PPOL 8667
Course Title: Economics of Health and Health Care
Pre-requisites and/or Co-requisites:

> For HSRD 8004 and PPOL 8667: Enrollment in the interdisciplinary Health Services Research Ph.D. program or the Public Health Policy Ph.D. program, or permission of the instructor.
> For ECON 6260: Admission to graduate program or permission of the instructor.

Course Description: This course will use economic theory and econometrics to analyze the functioning of the health care sector and appropriate public policy. Topics will include: how markets for medical care differ from other markets, the demand for medical care, the demand and supply of health insurance, the role of competition in medical markets, managed care, managed competition, and the role of the public sector in regulating and financing health care. The topic list is flexible and student input will be solicited and welcomed. (Alternate Fall)

Course Objectives: The intent of this course is to expand your knowledge of economic and econometric concepts and tools as they relate to health care institutions and policy. how markets for medical care differ from other markets, the demand for medical care, the demand and supply of health insurance, the role of competition in medical markets, managed care, managed competition, and the role of the public sector in regulating and financing health care. Following is a list of learning goals/objectives:

1. Students should be able to use economic concepts to frame questions and issues related to health services research.
2. Students should understand how models of behavior for health care entities differ from the perfectly competitive model.
3. Students should be able to explain the difference between the demand for health and the demand for healthcare, including factors that affect demand for both.
4. Students should be able to explain how the demand for insurance is influenced by deductibles, co-payments, and other factors.
5. Students should be able to explain the factors that affect the supply of insurance and should be able to explain how those factors interact with demand for insurance.
6. Students should understand various models of physician economic behavior, including the supplier-induced demand hypothesis and the public interest theory.
7. Students should understand various models of hospital behavior, including competitive effects, models of for-profit vs. non-profit behavior, and hospital production.
8. Use the concept of externalities to explain the rationale for government activity aimed at addressing public health problems
9. Students will demonstrate understanding of ways that the supply and demand for health insurance, behavior of physicians, hospitals, and other providers, externalities, and other concepts of the economics of health and health care affect diverse populations, with particular emphasis on populations affected by health disparities.

Academic Integrity: Please note that academic misconduct will **NOT** be tolerated. In addition, students have the responsibility to know and observe the requirements of The UNC Charlotte Code of Student Academic Integrity. This code forbids cheating, fabrication or falsification of information, multiple submissions of academic work, plagiarism, abuse of academic materials,

and complicity in academic dishonesty. Academic evaluations in this course include a judgment that the student's work is free from academic dishonesty of any type; and grades in this course therefore should be and will be adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction of the course grade. In almost all cases, the course grade is reduced to U. Copies of the code can be obtained from the Dean of Students Office or on the web at http://www.legal.uncc.edu/policies/ps-105.html . Standards of academic integrity will be enforced in this course. Students are expected to report cases of academic dishonesty to the course instructor.

In particular, students should be very careful not to engage in plagiarism. Plagiarism is when you use or borrow another person's words or ideas without giving them credit – in other words, stealing that person's work. Regardless of where you saw or heard these words or ideas – lecture, book, Internet, website, BLOG, chat room, letter, diary, newspaper, journal article, on TV or radio – you must reference that material and the person who spoke or wrote these ideas. As an author, you must cite a person's work whenever you use their idea, opinion, or theory, quote their exact words, or use facts, statistics or diagrams, unless that information is common knowledge, meaning something that most people could reasonably be expected to know (e.g. the name of the President of the United States is something that most people would know and you would not have to cite where you found this information). It is your job to ask your teacher if you have any questions about how to cite a source. Plagiarism is against the ethical code of the faculty and researchers at UNC Charlotte. Plagiarism shows a serious lack of honesty and truthfulness and it will be dealt with harshly.

Special Needs: If you have a documented disability and require accommodation in this course, you should register with the Office of Disability Services (230 Fretwell, 704-687-4355) during the first week of the semester, if you have not already done so. Information about available services may be found at http://www.ds.uncc.edu/ . Accommodations for learning will be arranged by that office and communicated to the Instructor.

Diversity Statement: UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status. If English is not your native or primary language and you have concerns that it will affect your performance in this course, you are encouraged to discuss it with the instructor.

Additional University Policies: All students are required to abide by the UNC Charlotte Sexual Harassment Policy (http://www.legal.uncc.edu/policies/ps-61.html) and the policy on Responsible Use of University Computing and Electronic Communication Resources (http://www.legal.uncc.edu/policies/ps-66.html). Sexual harassment, as defined in the UNC Charlotte Sexual Harassment Policy, is prohibited, even when carried out through computers or other electronic communications systems, including course-based chat rooms or message boards.

Grading Scale: Letter grades will be based on the following scale (in percentage terms):
    A   90 -100

B   80-89
C   70-79
U   Below 70

Communication: All students in the course are expected to check their UNC Charlotte email accounts regularly, as I will use email as the primary means of communicating course updates.

Teaching Strategies: The topics will be covered primarily in a lecture format, with assessment of lecture material conducted using two take-home exams. In addition, students will complete a research paper in stages on a topic of interest to them from the health economics literature. The Moodle page for the course will be used extensively to distributed course materials.

Evaluation: Students will be evaluated on the basis of a midterm exam (30%), a final exam (40%), and a research paper or cost-benefit/cost-effectiveness protocol (30%).

      Details Regarding Research Paper:
- Students must choose a paper topic and turn it into me for approval and comments by September 22.
- Students must turn in an outline of the proposed paper by October 6.
- Students must participate in the peer review of papers with two copies of your draft due on November 17 and peer evaluations due on December 1. Drafts must be uploaded to Moodle. I will assign each student two papers to review. The papers should be evaluated according to criteria provided by me. I will not use your peer's evaluation of your paper in assessing your paper's final grade. However, part of your final grade will depend on your participation in the peer evaluation process.
- The final paper should be approximately 8-20 pages in length, double-spaced with 1 inch margins. Students must submit one electronic copy of the final draft of the paper on December 8 via Moodle.
- The grade that you receive is based primarily on how well you develop and substantiate your thesis, and not on whether I agree or disagree with your conclusions. An "A" paper is one that has a well-developed thesis that uses economic theory and empirical evidence to advance and support its arguments.

In addition, the following guidelines apply:
- Select an economics of health topic that is of interest to you and is narrow enough to allow you to cover it in depth. Topic selection one of the most important components of the research process, and you should expect the process to involve preliminary reading. Your paper should involve the analysis of an important, well-defined topic in health economics. If you have any question regarding your topic, please see me as soon as possible.
- The paper should conform to an acceptable style and be thoroughly and correctly documented through the use of references, endnotes, or footnotes.
- The paper outline submitted on October 6 should be fairly detailed. I will examine the outline and provide feedback. Thus, the outline is an opportunity to obtain formal feedback prior to turning in the final paper. Suggested Paper Outline: 1. Title (or Topic), 2. Introduction and Statement of the Problem (specific research questions that will be addressed, why the topic is important, how you plan to approach the

problem), 3. Review of the Relevant Literature, 4. Analysis, Interpretation, Arguments, 5. Conclusions and Recommendations to Policy Makers.

In addition, the following advice taken from Santerre and Neun (2004), authors of *Health Economics: Theories, Insights, and Industry Studies*, should be heeded:

- A good paper must have a well-developed thesis or hypothesis. A thesis is a position, or proposition, that you intend to substantiate or prove with theory and facts. A strong research paper must be well-researched. Although it is difficult to establish the exact number of references a good paper usually cites, it is difficult to imagine a good paper with less than ten sources. When you do your research be sure to access textbooks, books, economic journals, current periodicals and newspapers.
- Begin your paper with an INTRODUCTION. It should be approximately two pages in length and its purpose is to outline what you intend to accomplish in the paper. A clear concise statement of your hypothesis is a must. The importance of the question or hypothesis should be made clear at this point. (Perhaps, some telling statistics bearing on the issue can be cited.) In addition, briefly explain your methodology and conclusions at the end of this section. Remember, you are not writing a mystery novel, so don't be afraid to tell the reader what you intend to accomplish and how you intend to do it.
- The second section, LITERATURE REVIEW, provides a review, synthesis and critique of the previous literature surrounding the hypothesis under investigation. You should explain how your paper fits in with the previous literature and discuss the novelty of your contribution. This section should be about three pages long.
- The third section, ANALYSIS, INTERPRETATION, AND ARGUMENTS, should be the main body of the paper, and it is here where you specify and develop your arguments to substantiate your thesis. You should draw on the economic theory and empirical findings discussed in class, or which you uncovered during your research from prior studies, to provide the theoretical underpinnings for your argument. It is very important that you logically develop your arguments so you do not contradict yourself. It is equally important that you are careful in the use of theory. The worst mistake you can make is to misrepresent known theory. Finally, if assumptions are needed then be bold - make them! When you write this section avoid using the first person. You are trying to persuade the reader based upon economic theory and empirical evidence, and not upon your personal convictions. A paper which states 'I think' this or 'I feel' that is too personal and emotional. Try to convince the reader based upon the strength of your arguments and not your personal beliefs. This section should be about five pages long.
- The last section of the paper is the CONCLUSION and should be about two pages in length. Here you sum up the arguments and discuss the (policy) implications of your research.

Following is a list of the most common problems found on former student papers. Points will be deducted from your grade if your paper has these problems:
1. Each paragraph should have a distinct message with a main sentence that includes the main point of the paragraph.

2. The economic relevance of the issue should be made explicit and should be an underlying theme that runs throughout the paper.
3. Check for grammar and spelling errors. Do not rely exclusively on software to do this for you.
4. Be careful about matching verbs and plural/singular nouns.
5. Do not use contractions.
6. Be careful about words that sound the same...there/their, led/lead, affect/effect.

Suggested Topics for Research Paper
1. Prescription Drugs: The Medicare Drug Benefit
2. Medical Savings Accounts: Who do they really help and how?
3. Long-Term Care: Ensuring quality in the provision of home health services for the elderly.
4. Hospital Mergers and Antitrust policy
5. Medical Malpractice and It's Affect on the Delivery of Medical Care
6. Alternative Methods of Covering the Uninsured in the U.S.
7. Alternative Medicine: Should insurance companies cover "non-traditional" medical care?
8. The Market for Registered Nurses: How wages and benefits of registered nurses working in hospitals and nursing homes are similar and different
9. Cost-Effectiveness or Cost-Benefit Analysis Research Proposal. For this topic, you would prepare a research proposal for the economic evaluation of alternative health care, disease control, or some other health related program of your choice. The proposed evaluation can involve an examination of an on going or completed program, or it can involve a scheduled or created program. You can propose to evaluate the program using cost-benefit analysis or cost-effectiveness analysis. To give you a sense of what you would need to include in such a proposal, following are a list of considerations that might be useful to include if you are proposing a cost-benefit analysis evaluation of an early intervention program.

Example of an outline for a Cost-Benefit Analysis Protocol:
1. Name and briefly describe the project or program you are proposing to evaluate.
   a. Identify the problem it attacks (Incidence, Prevalence)
   b. Indicate the health consequences of the problem (Morbidity, Mortality)
   c. Indicate the economic consequences of these health consequences Workloss (absenteeism, unemployment, shorter work life, lower on the job productivity) or Other (medical)
   d. Of the universe of those afflicted, who will the program attempt to help - target population. Their characteristics may affect economic consequences (e.g. age; unemployed vs. employed)
   e. Precisely define the actual method by which the program accomplishes its output (its production function).
2. Given the above, describe how you intend to evaluate it.
   a. Why you chose CBA, its value and limits with respect to the project evaluation at hand, i.e., why one was chosen over the other.

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      b.   Cost: Identify each cost of the project - explicitly. Explain how each would be evaluated (monetized)

      c.   Benefits: Identify each economic benefit of the project-explicitly. Explain how each would be evaluated (if CBA, this means dollars; *if CEA, identify outcome measure)

      d.   Decision-Rules: Explain how you would combine the monetized costs and benefits to decide whether the project is worthwhile.

3.   Explain where you would get the data necessary for each step and relate the data to that step. (Try to make the data source and effort necessary to get the data sound reasonable.) You do not have to actually collect the data, but you may do so.

If secondary data are not available identify and describe the type of study necessary to obtain the data.

Required Text and Readings: *The Economics of Health and Health Care*, by Folland, Goodman, and Stano (FGS), 6th edition, is required. In addition, I will post required and recommended articles and book chapters to the Moodle page for the course.

Course Schedule: Please note that additional readings may be announced as the semester progresses, and all assigned articles will be posted to the Moodle page for the course.

8/25   Introduction to the Course, Health Economics (Chapter 1), and Microeconomic Tools for Health Economics (Chapter 2)

               Hartman, Micah; Martin, Anne; McDonnell, Patricia; Catlin, Aaron. 2009. "National Health Spending In 2007: Slower Drug Spending Contributes To Lowest Rate Of Overall Growth Since 1998." *Health Affairs*, Jan/Feb, Vol. 28 Issue 1, p246-261.

9/1   Microeconomic Tools for Health Economics (Chapter 2) and Statistical Tools for Health Economics (Chapter 3)

9/8   Microeconomic Tools for Health Economics (Chapter 2) and Statistical Tools for Health Economics (Chapter 3)

9/15   Economic Efficiency and Cost Benefit Analysis (Chapter 4)

Braithwaite RS, Meltzer DO, King JT Jr., Leslie D, and MS Roberts. (2008). "What does the value of modern medicine say about the $50,000 per quality-adjusted life-year decision rule?" *Med Care.* 46(4): 349-356.

Chandra, A., Jena, A. B., & Skinner, J. S. (2011). The pragmatist's guide to comparative effectiveness research. *Journal of Econonmic Perspectives, 25*(2), 27-46.

Drummond, M, O'Brien, B, Stoddart, G, & Torrance, G. (2000). Chapter 5. *Methods for the Economic Evaluation of Health Care Programmes* (2nd ed.) New York: Oxford University Press.

Garber, AM ,and J Skinner. (2008). "Is American Health Care Uniquely Inefficient." *Journal of Economic Perspectives.* 22(4): 27-50.

Garber, AM and NA Solomon. (1999). "Cost-Effectiveness of Alternative Test Strategies for the Diagnosis of Coronary Artery Disease." *Annals of Internal Medicine.* 130:719-728.

Jackson, L. A., Schuchat, A., Gorsky, R. D., & Wenger, J. D. (1995). Should college students be vaccinated against meningococcal disease? A cost-benefit analysis. *Am J Public Health, 85*(6), 843-845.

Shiroiwa, T., Sung, Y.-K., Fukuda, T., Lang, H.-C., Bae, S.-C., & Tsutani, K. (2010). International survey on willingness-to-pay (WTP) for one additional QALY gained: what is the threshold of cost effectiveness? *Health Economics, 19*(4), 422-437.

Stinnett, AA and J Mullahy. (1998). "Net health benefits: a new framework for the analysis of uncertainty in cost-effectiveness analysis." *Med Decis Making.* 18(2 Suppl): S68-80.

9/22   **Research Paper Topic Due**

9/29   Economic Efficiency and Cost Benefit Analysis (Chapter 4)

Braithwaite RS, Meltzer DO, King JT Jr., Leslie D, and MS Roberts. (2008). "What does the value of modern medicine say about the $50,000 per quality-adjusted life-year decision rule?" *Med Care.* 46(4): 349-356.

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Drummond, M, O'Brien, B, Stoddart, G, & Torrance, G. (2000). Chapter 5. *Methods for the Economic Evaluation of Health Care Programmes* (2nd ed.) New York: Oxford University Press.

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Shiroiwa, T., Sung, Y.-K., Fukuda, T., Lang, H.-C., Bae, S.-C., & Tsutani, K. (2010). International survey on willingness-to-pay (WTP) for one additional QALY gained: what is the threshold of cost effectiveness? *Health Economics, 19*(4), 422-437.

Stinnett, AA and J Mullahy. (1998). "Net health benefits: a new framework for the analysis of uncertainty in cost-effectiveness analysis." *Med Decis Making.* 18(2 Suppl): S68-80.

10/6   **Research Paper Outline Due**

10/13   Production of Health (Chapter 5)

Cutler, D. M., & Ly, D. P. (2011). The (Paper)Work of Medicine: Understanding International Medical Costs. *Journal of Economic Perspectives, 25*(2), 3-25.

Garber, AM ,and J Skinner. (2008). "Is American Health Care Uniquely Inefficient." *Journal of Economic Perspectives.* 22(4): 27-50.

Lichtenburg, F. R., (2009). "The Quality of Medical Care, Behavioral Risk Factors, and Longevity." NBER Working Paper 15068, June.

10/20   Demand for Health Capital (Chapter 7)
          Distribute Test One (Midterm Exam) after Class

Volpp, K. G., Asch, D. A., Galvin, R., & Loewenstein, G. (2011). Redesigning Employee Health Incentives — Lessons from Behavioral Economics. *New England Journal of Medicine, 365*(5), 388-390.

10/27   Demand and Supply of Medical Insurance (Chapter 8)
          Test One Due (Midterm Exam) by 3:30PM

Baicker, K., & Goldman, D. (2011). Patient Cost-Sharing and Healthcare Spending Growth. *The Journal of Economic Perspectives, 25*(2), 47-68.

11/3   Consumer Choice and Demand (Chapter 9)

Manning, WG, Newhouse, JP, Duan, Naihua, Keeler, EB, and A Leibowitz. (1987). "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment." *American Economic Review.* 77: 251-277.

Meyerhoefer, C. D., & S. H.. Zuvekas (2008) "The Shape of Demand: What Does It Tell Us about Direct-to-Consumer Marketing of Antidepressants?," *The B.E. Journal of Economic Analysis & Policy*: Vol. 8: Iss. 2 (Advances), Article 4.

11/10	Asymmetric Information and Agency (Chapter 10)
	Cutler, D., & Dafny, L. (2011). Designing Transparency Systems for Medical Care Prices. *New England Journal of Medicine, 364*(10), 894-895
	Miller, E. A. (2011). Flying Beneath the Radar of Health Reform: The Community Living Assistance Services and Supports (CLASS) Act. *The Gerontologist, 51*(2), 145-155.
	Pauly, MV, and FE Blavin. (2008). "Moral hazard in insurance, value-based cost sharing, and the benefits of blissful ignorance." *Journal of Health Economics.* 27: 1407-1417.
	Sinaiko, A. D., & Rosenthal, M. B. (2011). Increased Price Transparency in Health Care — Challenges and Potential Effects. *New England Journal of Medicine, 364*(10), 891-894.

11/17	Organization of Health Insurance Markets (Chapter 11)
	Submit Draft of Research Paper to Moodle for Peer Review
	Gruber, J. (2008). "Covering the Uninsured in the United States." *Journal of Economic Literature.* 46(3): 571-606.
	Kolstad, J. T., & Kowalski, A. E. (2010). The Impact of Health Care Reform On Hospital and Preventive Care: Evidence from Massachusetts. *National Bureau of Economic Research Working Paper Series, No. 16012.*
	Pollack, A. (2011, January 1, 2011). Coupons for Patients, but Higher Bills for Insurers, *The New York Times.*

| 11/24 | **Thanksgiving – No class** |

12/1	Government Intervention in Health Care Markets (Chapter 19)
	Peer Evaluations of Drafts Due
	Glied, SA, 2008. "The Cost of Primary Care Doctors." NBER Working Paper 14568, December.
	McClellan, M. (2011). Reforming Payments to Healthcare Providers: The Key to Slowing Healthcare Cost Growth While Improving Quality? *Journal of Economic Perspectives, 25*(2), 69-92. http://pubs.aeaweb.org/doi/pdf/10.1257/jep.25.2.69/

12/8	Reading day – no class
	Research Paper Due
	Distribute Test Two (Final Exam)

| 12/15 | **Test Two Due (Final Exam) 2:00PM-4:30PM** |