

PUBHHP 7601 – Economic Analysis of Health Services
3 credits – Spring 2026
Tues and Thurs, 11:10-12:30, Cunz 160

Course Instructor

Eric Seiber, PhD in Economics, Tulane University 1999
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Instructor’s Office Hours

Tuesday, 12:30 pm - 1:30 AM or by appointment (make appointments directly with me).

Faculty Feedback & Response Time:

The following gives you an idea of my intended availability during the course:

- **Grading:** You can generally expect feedback within 7 days.
- **E-mail:** I will reply to e-mails (sent via Carmen) within 24 hours on school days.

Graduate Teaching Assistant (GTA)

Thomas Elton, elton.21@osu.edu

GTA Responsibilities

The TA will assist with scoring homework; however, final grades will be assigned by the professor. **Any questions regarding grading should be directed to the professor and not the TA.**

Course Description

This course will cover applications of microeconomic analysis to the health services industry, with emphasis on the market structure and managerial decisions.

Prerequisites

Graduate student standing in PUBHHMP or permission of instructor. Not open to students with credit for 801.

Course Learning Objectives

Upon successful completion of this course, students will be able to:

Objective	MHA	MPH Core	MPH Specialization	PhD
Provide an overview of selected topics in microeconomics	9			
Summarize applications of economic analysis to health services	9, 13	5	1, 2, 8	1, 2, 8, 11
Develop an ability to apply economic reasoning correctly to health care problems and issues	9, 10, 25	5	1, 2, 8	1, 2, 8, 11

Competencies:

MHA Program Competency Development and Assessment

The MHA curriculum has been developed to support students' development of [MHA Program Competencies](#) over our two-year curriculum, with each course designed to focus on a designated subset of competencies. Within each course, faculty will design assignments to support students' development of specified competencies, formally assess students' progress towards their attainment at the target level for the course (basic, intermediate, advanced), and provide feedback to students as to whether a competency has been "met" or "needs work" by the end of the course. Please note: while there is often a relationship between competency attainment and overall course grade, the purpose of the competency assessment is to provide students with feedback that can be used for future development and growth.

The table below summarizes the competencies that will be developed in this course, the activities/assignments that support students to develop this competency, and the measure that I will use to assess each students' attainment.

Competency	Level*	Modules/ Assignments	Final Assessment
MHA 9: Economic Analysis	I	<ul style="list-style-type: none">Duration of Course	Course Final Grade
MHA 10: Healthcare Issues and Trends	I	<ul style="list-style-type: none">Cost Effectiveness	Not-for-profit Hospitals Mini-case
MHA 13: Population Health	B	<ul style="list-style-type: none">Government Intervention - Externalities	MRSA Mini-case
MHA 25: Problem Solving & Decision Making	B	<ul style="list-style-type: none">Government Intervention - Externalities	MRSA Mini-case

*B- basic skills, encompassing knowledge and comprehension of subject matter; I- intermediate skills, encompassing application to analyze a problem; A= advanced skills, encompassing ability to evaluate, judge, and synthesize information

MPH Program Competency Development and Assessment

The table below summarizes the competencies that will be developed in this course, the activities/assignments that support students to develop this competency, and the measure that I will use to assess each students' attainment.

Competency	Modules/ Assignments	Final Assessment
MPH 10: Explain the social, political & economic determinants of health & how they contribute to population health & health inequities	<ul style="list-style-type: none">Economics Basics - Production of Health	Exam #1

Text/Readings:

Students can access textbook information via the Barnes & Noble bookstore website: www.shopOhioState.com as well as from their BuckeyeLink Student Center. This information is disseminated by B&N to all area bookstores. You may buy from a store of your choice and/or shop for books (always use ISBN# for searches) online. There is one required textbook for this course:

Folland, Goodman, and Stano, *The Economics of Health and Health Care*, 9th Edition (Prentice Hall, 2024).

All other required materials will be handed out in class or made available online.

There is not a formal economics prerequisite for this course, and the text should be readable without such background. However, those who have little background or would like additional explanation of the economic concepts can find equivalent readings in many microeconomics or principles of economics textbooks, a large selection of which can be found in the Business Library. If you have difficulty, please ask questions, as it is unlikely that you are alone.

Supplementary Readings

We do not read these books in class, but they are truly excellent resources for students wanting more perspectives on health economics.

Fuchs VR, *Who Shall Live?*, 2nd Expanded Edition (World Scientific, 2011).

- This book is a classic written by one of the most famous health economists. First published in 1978, this edition contains the original book and updates the author has included with each subsequent edition. Readers frequently find the book distressing given how his critique from 1978 still holds true today.

Rice T, *The Economics of Health Reconsidered*, 1st Edition (Health Administration Press, 1998).

If you read this book, purchase the 1998 edition at 195 pages. The subsequent editions are a textbook.

Carmen

There is a Carmen site for this course: <https://carmen.osu.edu>. All course materials are available via Carmen. The professor will post slides as well as other pertinent course documents on this site.

You will need to use BuckeyePass (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions (<https://admin.resources.osu.edu/buckeyepass/adding-a-device>)
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application (<https://admin.resources.osu.edu/buckeyepass/installing-the-duo-mobile-application>) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357(HELP) and IT support staff will work out a solution with you.

Class Format: How this course works

- **Mode of delivery:** In Person
- **Credit hours and work expectations:** This is a **3-credit-hour course**. According to Ohio State policy (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction in addition to 6 hours of homework/active learning activities (e.g., class preparation, readings, problem sets, cases) to receive a grade of (C) average.

- **Attendance and participation requirements:** Class participation is difficult if you do not attend class. If you do not attend class, you are required to email a notification to the TA at elton.21@osu.edu. I let students determine their optimal attendance. Students should compare the marginal benefit of an alternative activity to the marginal cost of not attending class (a deduction from their final grade). I plan to excuse one absence. Additional absences will be deducted from the class participation grade. Excessive absences will produce an additional cost and can lead to a failing grade. Unreported absences will also produce an additional cost. Should in-person classes be canceled, I will notify you as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via email message from CarmenCanvas.

Course Technology

Technology skills needed for this course

- Basic computer and web-browsing skills
- Navigating Carmen (go.osu.edu/canvasstudent)
- CarmenZoom virtual meetings (go.osu.edu/zoom-meetings)

Required equipment

- **Computer:** current Mac (Mac OSX) or PC (Windows 10+) with high-speed internet connection
- **Calculator:** Students should have access to a scientific calculator that can perform basic arithmetic, square roots, logarithms, and exponentiation.
- **Other:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication
- **Webcam:** built-in or external webcam, fully installed and tested
- **Microphone:** built-in laptop or tablet mic or external microphone

Required software

- **Microsoft 365 Copilot (formerly Office 365)**
All Ohio State students are now eligible for free Microsoft 365 Copilot (formerly Office 365). Full instructions can be found at go.osu.edu/office365help.

Technology support

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** <http://it.osu.edu/help>
- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu

Assignments/Assessments: The course grade is based on three weighted items:

Class Participation	10%
Problems/Mini-cases	20%
Exam #1	35%
Exam #2	35%
Total	100%

Exams: 70%

The two exams will be taken in class on the dates listed on the syllabus. The format of the exams is short answer. All students are required to take the exam on the specified date, however contact the professor if you have a special circumstance which prevents you from taking the exam on the specified date.

Assignments: 20%

We will discuss a variety of “mini-cases” and problems in class. These cases emphasize economic reasoning and understanding of issues. There will be a significant penalty for late cases. These mini-cases will be a mix of individual and group work. Expectations on solo vs group work will be discussed for each mini-case.

Grading

Students should remember that performance expected for graduate school does not imply an A in the course. The following descriptions outline the relationship between expectations and letter grades and the anticipated grade assignment distribution:

A	100-94	Outstanding work that reflects mastery of the material and the ability to apply it critically and creatively
A-	93-90	Excellent work that reflects mastery of the material
B+	89-87	Good work that reflects mastery of most of the material
B	86-83	Good work that reflects mastery of some of the material
B-	82-80	Good work that reflects mastery of a few aspects of the material
C+	79-77	Mediocre work that reflects familiarity with, but not mastery of the material
C	76-73	Mediocre work that reflects familiarity with most of the material
C-	72-70	Mediocre work that reflects some familiarity with the material
D	60-69	Mediocre work that reflects little familiarity with the material
E	Under 60	

Class Policies

Electronics Policy: While I do not have an outright ban on the use of electronics (laptops, smart phones, etc.) in the classroom, I have developed a dim view of their educational value for this class. Permission to use of any electronic device must be obtained prior to its use. Due to the potential distraction to the student and students seated around the individual, I rarely grant this permission. Similarly, permission should be requested before reading a newspaper or magazine, but this permission is rarely granted. Students violating this policy may be asked to leave the class, face a reduction in their grade, or both. I do make a blanket exception for the front row of seats. Students may use a tablet or laptop for notes in the front row as long as the device lays flat on the desk.

Copyright Statement

This syllabus and all course materials (e.g., homework assignments, solution keys, course materials) are under copyright by the instructor and cannot be posted elsewhere without written permission.

Generative AI Policy

AI tools are not authorized for this course. There has been a significant increase in the popularity and availability of a variety of generative artificial intelligence (AI) tools, including ChatGPT, Sudowrite and others. These tools will help shape the future of work, research and technology but when used in the wrong way, they can stand in conflict with academic integrity at Ohio State.

All students have important obligations under the **Code of Student Conduct** to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use unauthorized assistance in the laboratory, on field work, in scholarship or on a course assignment unless such assistance has been authorized specifically by the course instructor. In

addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing of writing, ideas or other work that is not your own. These requirements apply to all students undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.

Office of Student Life: Disability Services

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are ill and need to miss class, including if you are staying home and away from others while experiencing symptoms of a viral infection or fever, please let me know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu.

Mental Health Services

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling [614-292-5766](tel:614-292-5766). CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at [614-292-5766](tel:614-292-5766) and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Religious Beliefs or Practices Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to,

rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Civil Rights Compliance Office](#). (Policy: [Religious Holidays, Holy Days and Observances](#))

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee ([Faculty Rule 3335-5-48.7 \(B\)](#)). For additional information, see the [Code of Student Conduct](#).

Intellectual Diversity

Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of study and the content covered in the course. Preparing students for citizenship includes helping them develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

Grievances and Solving Problems

A student who encounters a problem related to his/her educational program has a variety of avenues available to seek resolution. According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, you may take your case to the department chairperson. Specific procedures are outlined in [Faculty Rule 3335-8-23](#), the [CPH Graduate Student Handbook](#), and the [CPH Undergraduate Student Handbook](#). Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department.

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status,

national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Civil Rights Compliance Office:

Online reporting form at <http://civilrights.osu.edu/>,

Call 614-247-5838 or TTY 614-688-8605,

Or Email civilrights@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Civil Rights Compliance Office to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

Course Outline

NOTE: This is an anticipated schedule. Subject dates and readings may vary depending on duration of class discussions.

Topic #1: Introduction to the Economics of Health Care	Tues 1/13 and Thurs 1/15
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Note: Materials marked with an "" are supplementary/optional reading.*

Auerbach DI and Kellermann AL. A Decade Of Health Care Cost Growth Has Wiped Out Real Income Gains For an Average US Family. *Health Affairs*, 2011. Available at: <http://content.healthaffairs.org/content/30/9/1630>.

Christensen, Bomer, and Kenagy. Will Disruptive Innovations Cure Health Care? *Harvard Business Review*, Sept-Oct 2000. Available at: <https://hbr.org/2000/09/will-disruptive-innovations-cure-health-care>

Lallemant NC. Reducing Waste in Health Care. *Health Affairs*, Dec 2012. Available at http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=82.

Mullan, F. A Founder of Quality Assessment Encounters a Troubled System Firsthand. *Health Affairs*, 2001; v20(1):137-141. Available at: <https://www.healthaffairs.org/doi/10.1377/hlthaff.20.1.137>.

Makary MA and Daniel M. Medical error – the third leading cause of death in the US. *BMJ*, 2016. Available at: <http://www.bmj.com/content/bmj/353/bmj.i2139.full.pdf>

Folland, Goodman, and Stano, *The Economics of Health and Health Care*, 7th Edition (Prentice Hall, 2013). (hereafter "Folland, Goodman, and Stano"), Ch. 1 Introduction.

Topic #2: Economics Basics	Tues 1/20, Thurs 1/22 and Tues 1/27
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Folland, Goodman, and Stano. Ch. 5 – Production of Health.

Schroeder, SA. We Can Do Better – Improving the Health of the American People. *New England Journal of Medicine*, 2007; v357(12):1221-1228. Available at: <http://www.nejm.org/doi/full/10.1056/NEJMsa073350>.

Rogan E and Bradley E. Investing in Social Services for States' Health: Identifying and Overcoming the Barriers. Milbank Memorial Fund, 2016. Available at: <https://www.milbank.org/publications/investing-in-social-services-for-states-health-identifying-and-overcoming-the-barriers/> .

Folland, Goodman, and Stano. Ch. 2 – Microeconomic Tools for Health Economics.
Highly recommended; this chapter covers most of the theory covered in the course.

Topic #3: Demand	Thurs 1/29, Tues 2/3 and Thurs 2/5
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Folland, Goodman, and Stano, Ch. 9 Consumer Choice and Demand.

*Michael Grossman. On the concept of health capital and the demand for health. *Journal of Political Economy* 80 (March-April 1972).

*Arleen A. Leibowitz. The demand for health and health concerns after 30 years. *Journal of Health Economics* 2004; 23:663-671.

Topic #4: Supply

Tues 2/10, Thurs 2/12 and Tues 2/17

Folland, Goodman, and Stano, Ch. 6.

Topic #5: Public Goods, Market Failure, and Role of Gov

Thurs 2/19, Tues 2/24 and Thurs 2/26

Folland, Goodman, and Stano, Ch 19.

*Len M. Nichols et al. Are market forces strong enough to deliver efficient health care systems? Confidence is waning. *Health Affairs* 2004; 23: 8-21.

*Michael E. Porter and Elizabeth Olmsted Teisberg. Redefining competition in health care. *Harvard Business Review* 2004; June: 65-76.

TBA

Tues 3/3

Exam #1

Thurs 3/5

Topic #6: Demand for Health Insurance

Tues 3/10 and Thurs 3/12

Folland, Goodman, and Stano, Ch. 8 The Demand and Supply of Insurance

*John A. Nyman. Is 'moral hazard' inefficient? The policy implications of a new theory. *Health Affairs* 23 (September/October 2004), 194-199.

*Kenneth J. Arrow. Uncertainty and the welfare economics of medical care. *American Economic Review* 53 (December 1963), 941-973.

*Kenneth Arrow and the changing economics of health care. *Journal of Health Politics, Policy and Law* 26 (Special Issue, October 2001).

Spring Break

Tues 3/17 and Thurs 3/19

Topic #7: Economic Evaluation of Health Services**Tues 3/24, Thurs 3/26 and Tues 3/31**

Folland, Goodman, and Stano, Ch. 4 Cost and Benefit Analysis.

Maciosek MV, Coffield AB, Edwards NM, et al. Priorities Among Effective Clinical Preventive Services - Results of a Systematic Review and Analysis. *Am J Prev Med* 2006;31(1): 52-60. Available at:
<http://www.sciencedirect.com/science/article/pii/S0749379706001243>.

Bobadilla JL, Cowley P, Musgrove P, Saxenian H. Design, content and financing of an essential national package of health services. *Bull World Health Organ* 1994; 72(4):653-662.
http://apps.who.int/iris/bitstream/10665/53382/1/bulletin_1994_72%284%29_653-662.pdf

*Neumann PJ, Sanders GD, Russell LB, Siegel JE, and Ganiats TG, eds. *Cost-Effectiveness in Health and Medicine*. Oxford U. Press, 2016, 2ed.

TBA**Thurs 4/2****Topic #8: Care Settings and Market Behavior in Practice****Tues 4/7 and Thurs 4/9**

Folland, Goodman, and Stano, Ch. 13 Nonprofit Firms.

Folland, Goodman, and Stano, Ch. 14 Hospital and Long Term Care.

Topic #9: Asymmetric Information & agency**Tues 4/14 and Thurs 4/16**

Folland, Goodman, and Stano, Ch. 10 Asymmetric Information and Agency.

Emanuel EJ and Fuchs VR. The Perfect Storm of Overutilization. *Journal of the American Medical Association* 2008. v299(23): 2789-2791. Available at:
<http://jama.jamanetwork.com/article.aspx?articleid=182076>

*George A. Akerlof. The market for 'lemons': quality uncertainty and the market mechanism. *Quarterly Journal of Economics* 84 (August 1970), 488-500.

Topic #10: Physician Services and Health Care Labor Markets**Tues 4/21, Thurs 4/23**

Folland, Goodman, and Stano, Ch. 15 The Physician's Practice.

Folland, Goodman, and Stano, Ch. 16 Healthcare Labor Markets and Professional Training.

Horrocks S, Anderson E, and Salisbury C. Systematic review of whether nurse practitioners working in primary care can provide equivalent care to doctors. *BMJ* 324(April 2002), 819-823. Available at: <http://www.bmj.com/content/324/7341/819>.

Mundinger, MO et al. Primary Care Outcomes in Patients Treated by Nurse Practitioners or Physicians. *Journal of the American Medical Association* 283(January 2000), 59-68. Available at: <http://jama.jamanetwork.com/article.aspx?articleid=192259>.

*Eric E. Seiber. Physician Code Creep: Evidence in Medicaid and State Health Insurance Billing", *Health Care Financing Review* 2007; v28(4), 83-94

Exam #2 10:00-11:45

Mon 5/4