

**SYLLABUS  
PHCY 88  
PHARMACY OPERATIONS:  
PLANNING, DEVELOPING, AND EVALUATING A PHARMACEUTICAL CARE SERVICE  
SPRING, 2006  
UNC-CH School of Pharmacy**

**COURSE DIRECTOR**

**Richard Hansen, PhD**

Assistant Professor  
Division of Pharmaceutical Outcomes and Policy  
Office location: Kerr 2205  
Office hours: Wednesday and Friday 8-9 AM or by appointment  
Phone: 966-7517  
Email: [rahansen@unc.edu](mailto:rahansen@unc.edu)

**TEACHING ASSISTANTS**

**Sharon Chen**

Graduate Student  
Division of Pharmaceutical Outcomes and Policy  
Office location: Beard Hall Room 20  
Office hours: Tuesdays and Wednesdays 1-2 PM or by appointment  
Email: [shihyin@email.unc.edu](mailto:shihyin@email.unc.edu)

**TBA**

Office location:  
Office hours:  
Email:

**COURSE FACULTY**

**Dale Christensen, PhD**

Email: [christen@email.unc.edu](mailto:christen@email.unc.edu)

**Daniel Garrett, MS, RPh**

Email: [dgarrett@aphanet.org](mailto:dgarrett@aphanet.org)

**Amanda Clarke Henley**

Email: [ahenley@email.unc.edu](mailto:ahenley@email.unc.edu)

**Mary Roth, PharmD, MHS**

Email: [mroth@unc.edu](mailto:mroth@unc.edu)

**Betsy Sleath, PhD**

Email: [bsleath@email.unc.edu](mailto:bsleath@email.unc.edu)

**Elliot Sogol, PhD**

Email: [esogol@aphanet.org](mailto:esogol@aphanet.org)

**Rowena Wei, PharmD**

Email: [rwei@unch.unc.edu](mailto:rwei@unch.unc.edu)

**Morris Weinberger, PhD**

Email: [mweinber@email.unc.edu](mailto:mweinber@email.unc.edu)

**Bradford Woodard**

Email: [Bradford.Woodard@ncmail.net](mailto:Bradford.Woodard@ncmail.net)

**CLASS MEETING TIMES AND LOCATION**

Time: MWF 11:00 – 11:50 AM

Location: Kerr Hall 2001

**TEXTBOOK / REQUIRED LEARNING RESOURCES**

Required Readings: Assigned articles will be posted on blackboard or distributed during class.

**COURSE DESCRIPTION**

This course is designed to equip students with the skills necessary to design, implement, and evaluate pharmaceutical services. Topics covered in this course focus on the non-clinical aspects of pharmacy services. These include policy and public health issues, economic and financial considerations, and principles relative to business management and evaluation.

## DESIRED COURSE OUTCOMES

By the end of the course, students should be able to develop a pharmaceutical care service program for a specific community or practice area, propose a business plan, design a marketing strategy, and develop qualitative evaluation criteria. Additionally, students should have a general understanding of important issues and controversies relevant to the delivery of pharmacy services.

### Behavioral objectives are:

1. To evaluate communities on a population level and design a pharmaceutical care plan tailored to the needs of an individual community, practice, and business environment.
2. To understand and be able to apply concepts of strategic planning and management to the development of a pharmaceutical care service in a designated community.
3. To understand and be able to apply the tools of financial assessment to determine the financial feasibility of implementing a pharmaceutical care plan within a pharmacy setting.
4. To understand the interactions of the U.S. health care system (public and private insurance) and how various components of that system create different drug related incentives for providers and patients.
5. To interpret, select, and apply measures of quality to pharmaceutical care programs.
6. To understand how to evaluate outcomes of pharmacy services.
7. To discuss and interpret how current issues and controversies in the field of pharmacy affect individual practitioners and their delivery of services.

## EXPECTATIONS FOR CLASSROOM DECORUM

You are expected to attend and participate in class discussions. Your attendance and participation will contribute to your final grade. Please arrive on time and be respectful of your fellow students.

## ACADEMIC INTEGRITY / HONOR CODE

The principles of academic honesty, integrity, and responsible citizenship govern the performance of all academic work and student conduct at the University as they have during the long life of this institution. Your acceptance of enrollment in the University presupposes a commitment to the principles embodied in the Code of Student Conduct and a respect for this most significant Carolina tradition. Your participation in PHCY 88 comes with the expectation that your work will be completed in full observance of the Honor Code. Academic dishonesty in any form is unacceptable. If you have any questions about your responsibility or the responsibility of faculty members under the Honor Code, please consult the Pharmacy Student Attorney General ([pharmacyattorneygeneral@unc.edu](mailto:pharmacyattorneygeneral@unc.edu)).

## DESCRIPTION OF TEACHING / LEARNING METHODS

In general, classes will be devoted to lectures, guest speakers, and student presentations. Class time is intended to provide you with general knowledge and skills necessary to develop a comprehensive plan for a successful pharmacy service. Additionally, classes will provide relevant background and examples to help complete group projects. However, in many cases, you will be required and expected to search for additional information for specific assignments.

## ASSIGNMENT GUIDELINES

**Group Projects:** you will work on four projects in groups of approximately 5 students. Each group is responsible for selecting a specific pharmacy type or setting in a county in North Carolina. It may be an existing pharmacy, or you may plan for a new pharmacy in a specific location. ***If you choose an existing pharmacy, please do not identify the name of the pharmacy or use their name or logo for any of your work.***

Each group must submit one copy of a written report for each project. The reports should use an 11 or 12-point font of a common type, with 0.75 - 1" margins. As a general guide, reports should be no more than **6-8** pages long. Additional pages may be included for figures or graphs. Be sure to include a bibliography. Any standard citation method is sufficient as long as it is complete. The report should have a cover page stating the title of the report and the names of the group members. Reports should be stapled in the upper left hand corner. Save your \$\$ -- do not submit reports in folders or other materials.

Below are brief descriptions of the project assignments. Additional details will be provided as the projects are introduced.

1. **Service and Market Assessment; Proposed Pharmacy Service:** Select a specific county in North Carolina and identify a pharmacy setting. Given your county and pharmacy type, assess the status of health and healthcare in the county/community and available medical care resources. Based on this assessment, propose and describe a needed pharmacy service. Conduct and summarize a literature search that explores like services or programs. Conduct a SWOT analysis for your service.
2. **The Financial Plan:** After you have identified a pharmacy setting and a potential service opportunity, you need to consider the financial viability of your proposed service. Characterize your start-up costs, variable costs, and fixed costs. Outline your fee schedule and determine your total revenue for the number of patients you plan to serve. Illustrate how total revenue changes if you were to serve less than or more than your target number of patients. Given your anticipated costs and revenue, illustrate your break-even point.
3. **Quality Assessment and Assurance:** A formal plan for quality assessment and evaluation are critical to the success of a pharmacy service. Conduct a literature search and describe outcome measures that could be used to define quality for your service or population. Focus on reliable and valid measures, if available. Describe measures as structural, process, or outcome. Establish a plan for quality assessment and assurance for your pharmacy service. Describe the measures you will use, including the source of the data (i.e., patient interview, pharmacist documentation, survey, etc.), the data collection instrument, and how often data will be collected and analyzed. Describe the types of reports that will be generated, and how these reports will be used to assure quality.
4. **Final Project:** For the final project you are asked to assemble a complete business plan for your pharmacy service. Your business plan should include an executive summary, background and description, market analysis and strategy, operation structure and processes, financial projections, milestones, schedule, and action plan, critical risks and opportunities, exit strategy, and conclusions. The final business plan should be suitable for presentation to a potential employer or payer.

## ASSESSMENT AND GRADING

Most homework will be graded on a group basis. However, **grades will be adjusted to reflect differing amounts of work done by each student.** An individual may receive as much as a full grade higher or lower than his/her group grade, depending on the relative contribution made by the student to the assignment. In an anonymous fashion, other group members will determine individual contributions to the group. If a particular group member has been unanimously identified to contribute nothing to the project, that student will be asked to complete the assignment independently. Please be as objective as possible when assessing other students.

### Course grades will be based on the following:

Group Project 1: Service and Market Assessment	15%
Group Project 2: The Financial Plan	15%
Group Project 3: Marketing and Evaluation	15%
Group Project 4: Final Project	15%
Quiz 1	10%
Quiz 2	10%
Quiz 3	10%
Class Participation	10%

**Class participation:** will be assessed through random quizzes and completion of in-class exercises. You are expected to attend lecture. If for any reason you cannot attend lecture on a given day, your absence will be excused only if you contact the course coordinator or a teaching assistant prior to the start of lecture on that day. For excused absences, you may be required to meet with the course coordinator or teaching assistant in order demonstrate understanding of the learning objectives covered during your absence.

**Quizzes:** will be during the regularly scheduled class time. They will include the material covered in class and in the readings, and will consist of multiple choice and short answer questions. If you miss a quiz for any reason, you will only be allowed to reschedule if you have notified the course coordinator prior to the start of the quiz. Excused absences will be evaluated on a case by case basis.

**Group Projects:** you will work on four projects in groups of approximately 5 students. Groups will be determined by the end of the second week of class. You will be allowed to form your own groups; students that prefer to be assigned to a group will be given that option.

**Project Work Days:** have been scheduled to allow groups to meet during class time. The course coordinator and teaching assistants will be available to meet with your group during this time, although you are not required to attend class on these days if your group chooses to meet elsewhere.

**Project Presentations:** will be made throughout the semester. For each project your group should prepare 4-6 Powerpoint slides. Each group will be selected randomly at least once during the semester to present their project. A copy of your presentation should be submitted with each project.

### Grading policy:

A	90-100
B	80-89
C	70-79
Fail	≤ 69

Final grades will be rounded to the nearest whole number (e.g., 89.5 rounded to 90 but 89.4 rounded to 89). At the discretion of the course director, students with final course grades below C will be offered the opportunity to improve their grade. These students will be assigned a temporary grade of INC; grades of INC must be resolved within 8 weeks of completing the course or the student will receive a failing grade. Students who are allowed the opportunity to improve their grade cannot receive a grade above C.

## PHARMACY 88

### PHARMACY OPERATIONS:

#### PLANNING, DEVELOPING, AND EVALUATING A PHARMACEUTICAL CARE SERVICE

#### SPRING 2006

Course Coordinator: Richard A. Hansen, PhD

Class Times: MWF 11-11:50

Location: Kerr 2001

DATE	TOPIC, LEARNING OBJECTIVES, ASSIGNED READINGS	SPEAKER
1/9/06 M	<b>COURSE OVERVIEW</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>• Know the course objectives, expectations, grading assignments, and responsibilities</li> </ul>	Hansen
1/11/06 W	<b>The Case for Pharmaceutical Care</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>• Know and be able to articulate the need for pharmaceutical care</li> <li>• Give examples of access, cost, and qualitative problems with drug usage in the US</li> <li>• Give examples of what has been tried to date to address these problems</li> <li>• Provide a definition of pharmaceutical care</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>1) Weinberger M, Murray MD, Marrero DG et al., Effectiveness of pharmacists care for patients with reactive airways disease: a randomized controlled trial. JAMA 2002;288:1594-1602.</li> <li>2) Gans JA, Williams JM. Letter to the editor. JAMA 2003;289(9):1105.</li> </ol>	Sleath
1/13/06 F	<b>Drug Therapy Problems</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>• Know categories of drug therapy problems</li> <li>• Articulate the need for pharmacists to recognize, document, and address drug therapy problems</li> <li>• Describe the frequency of drug therapy problems identified in community pharmacies</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>1) McDonough RP, Doucette WR. Drug therapy management: an empirical report of drug therapy problems, pharmacists' interventions, and results of pharmacists' actions. J Am Pharm Assoc (Wash DC). 2003 Jul-Aug;43(4):511-18.</li> </ol>	Roth
1/16/06 M	<b>Martin Luther King Holiday – No class</b>	
1/18/06 W	<b>Overview of Medication Therapy Management (MTM)</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>• Understand the requirement for MTM under the Medicare prescription drug benefit</li> <li>• Describe minimum eligibility requirements for MTM</li> <li>• Discuss the implications of MTM programs for pharmacy practice</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>1) The Lewin Group. Medication therapy management services: a critical review. J Am Pharm Assoc (Wash DC). 2005 Sep-Oct; 45(5):580-87.</li> </ol>	Roth
1/20/06 F	<b>Practice Models</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>• Understand who develops Medicare MTM programs and give examples of how the service is provided</li> <li>• Describe the core components of MTM in community pharmacy</li> <li>• Discuss alternative practice models for improving medication use</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>1) American Pharmacist Association and National Association of Chain Drug Stores Foundation. Medication therapy management in community pharmacy practice: core elements of an MTM service (version 1.0). J Am Pharm Assoc (Wash DC). 2005; 45(5):573-9.</li> </ol>	Roth

DATE	TOPIC, LEARNING OBJECTIVES, ASSIGNED READINGS	SPEAKER
1/23/06 M	<b>Project #1 Introduction and Example</b>	Hansen
1/25/06 W	<b>Paying for Pharmacy Services</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Describe examples of services that pharmacists are being paid for around the country</li> <li>Discuss alternative reimbursement models for patient care services</li> <li>Develop a plan for establishing and marketing services to consumers and payers</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>Pharmacy Times. Beyond Asheville (supp) June 2005:1-32.</li> </ol>	Garrett
1/27/06 F	<b>Planning for a Pharmaceutical Care Practice</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Describe and distinguish between the major steps involved in the planning process</li> <li>Distinguish between planning as an activity and developing a strategic plan</li> <li>Be familiar with SWOT analysis</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>American Geriatrics Society. Practice management toolkit: strategic planning and market analysis. 2004; 1-9. Available at: <a href="http://www.frycomm.com/ags/toolkit/chapter4.shtml">http://www.frycomm.com/ags/toolkit/chapter4.shtml</a></li> </ol>	Hansen
1/30/06 M	<b>Community Assessment of Health-Related Needs</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Differentiate between efficacy and effectiveness</li> <li>Explain pharmaceutical care as an efficacy modifier</li> <li>Identify 3 approaches to identifying a pharmaceutical care target population and discuss practical advantages and disadvantages of each</li> <li>State 2 examples of how health-related need has been assessed in the community</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>Ernst ME, et al. Use of point-of-service health status assessments by community pharmacists to identify and resolve drug-related problems in patients with musculoskeletal disorders. <i>Pharmacotherapy</i>. 2001;21(8):988-997.</li> <li>Bislew HD, Sorensen TD. Use of focus groups as a tool to enhance a pharmaceutical care practice. <i>J Am Pharm Assoc (Wash DC)</i>. 2003 May-Jun;43(3):424-33.</li> </ol>	Hansen
2/1/06 W	<b>Public Health Information Resources in NC</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Become familiar with the types of data maintained by the NC State Center for Health Statistics (SCHS).</li> <li>Be able to access and use available data from the SCHS in a countywide and community-wide assessment of health problems, demographic characteristics, and potential need for pharmaceutical care services.</li> </ul>	Woodard
2/3/06 F	<b>Introduction to Geographic Information Systems (GIS)</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Be familiar with GIS technology and its application to business and service planning</li> <li>Know where to find additional resources for GIS</li> </ul>	Henley
2/6/06 M	<b>Documenting Pharmacists' Professional Activities</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Differentiate between documentation of processes and outcomes of care</li> <li>Be familiar with existing documentation tools</li> </ul> <u>Readings:</u> <p>Poirier S, et al. Billing third party payers for pharmaceutical care services. <i>JAPhA</i>. 1999;398(1):50-64.</p>	Christensen
2/8/06 W	<b>Dealing with Third-Party Payers: Understanding the Drug Benefit</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Discuss options insurers have for managing the drug benefit</li> <li>Explain what "carve out" means</li> <li>Describe what PBMs are and their strategies for reducing costs and assuring quality</li> </ul> <u>Readings:</u> <p>Olson BM. Approaches to pharmacy benefit management and the impact of consumer cost sharing. <i>Clinical Therapeutics</i>. 2003;25(1):250-72.</p>	Hansen  (Roth lecture)

DATE	TOPIC, LEARNING OBJECTIVES, ASSIGNED READINGS	SPEAKER
2/10/06 F	<b>Models of Reimbursement</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Describe various methods used to control drug costs</li> <li>Understand the difference between fee-for-service and risk-sharing arrangements</li> <li>Explain the pros and cons of alternative forms of payment to pharmacists</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>Farris KB, Kumbera P, Halterman T, Fang G. Outcomes-based pharmacist reimbursement: reimbursing pharmacists for cognitive services. <i>JMCP</i>. 2002;8(5):383-93.</li> </ol>	Hansen
2/13/06 M	<b>Project Work Day</b>	Hansen
2/15/06 W	<b>Project #1 Presentations</b>	Hansen
2/17/06 F	<b>Quiz 1</b>	Hansen
2/20/06 M	<b>Project #2 Introduction and Example</b>	Hansen
2/22/06 W	<b>Cost to Provide a Service</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li><b>Distinguish between start-up costs and ongoing costs</b></li> <li><b>Distinguish between fixed and variable costs</b></li> <li><b>Distinguish among average, marginal, and incremental cost</b></li> <li><b>Know what cost elements are factored in marginal and incremental cost</b></li> </ul>	Hansen
2/24/06 F	<b>Revenue and Break-Even Analysis</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li><b>Describe sources of revenue for pharmacy services</b></li> <li><b>Know how to conduct a break-even analysis and demonstrate how changes in cost or revenue can alter your break-even point</b></li> </ul>	Hansen
2/27/06 M	<b>Financial Management Basics</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Differentiate between income statements and balance sheets and understand what they show about a financial enterprise</li> <li>Identify common elements contained in an income statement and balance sheet</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>Carroll NV. Ch 2: Financial Statements. <i>Financial Management for Pharmacists: A Decision-Making Approach</i>. Williams &amp; Wilkins: Baltimore, MD, 1998.</li> </ol>	Hansen
3/1/06 W	<b>Financial Management Basics - Continued</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Understand and be able to distinguish common accounting terms, including: expenses vs. expenditures, depreciation, cost of goods sold, gross margin, and current- vs. long-term assets</li> <li>Know where to find common accounting information on financial statements</li> </ul>	Hansen
3/3/06 F	<b>Financial Analysis</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Know how to use ratio analyses to assess profitability, overall performance, liquidity, solvency, and efficiency</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>Carroll NV. Ch 5: Financial Statement Analysis. <i>Financial Management for Pharmacists: A Decision-Making Approach</i>. Williams &amp; Wilkins: Baltimore, MD, 1998.</li> </ol>	Hansen
3/6/06 M	<b>Management Principles</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>Discuss the role of the pharmacist in the management process</li> <li>Describe and discuss the skills of managers</li> </ul>	Sogol

DATE	TOPIC, LEARNING OBJECTIVES, ASSIGNED READINGS	SPEAKER
3/8/06 W	<b>Marketing, and Advocacy – Principles &amp; Concepts</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>• Understand the basic principles of marketing</li> <li>• Differentiate product marketing from service marketing</li> <li>• Discuss the five stages of adoption</li> <li>• Discuss relationship marketing as a mechanism to promote pharmacy services</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>1) Doucette WR et al. Beyond the 4Ps: Using relationship marketing to build demand for pharmacy services. <i>JAPhA</i> 2002;42(2):183-194.</li> </ol>	Hansen
3/10/06 F	<b>CREATING CONSUMER DEMAND: PROMOTIONAL STRATEGIES IN SERVICE MARKETING</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>• Differentiate promotion from advertising</li> <li>• Identify and define promotional strategies that can be used in a pharmacy setting</li> <li>• Discuss the role of price in service marketing; understand the relationship between price and reimbursement</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>1) Holdford DA. Using buzz marketing to promote ideas, services, and products. <i>JAPhA</i>. 2004; 44(3): 387-95.</li> </ol>	Hansen
3/13/06 3/15/06 3/17/06	<b>Spring Break</b>	
3/20/06 M	<b>Project Work Day</b>	Hansen
3/22/06 W	<b>Project #2 Presentations</b>	Hansen
3/24/06 F	<b>Quiz 2</b>	Hansen
3/27/06 M	<b>Project #3 Introduction and Example</b>	Hansen
3/29/06 W	<b>Quality as a Process</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>• Understand conceptual and operational definitions of quality of care from the perspectives of health care systems, providers and patients</li> <li>• Understand key issues related to the quality of health care in the United States</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>1) McGlynn EA, Asch SM, Adams J, Keeseey J, Hicks J, DeCristofaro A, Kerr EA. The quality of health care delivered to adults in the United States. <i>NEJM</i> 2003;348(26):2635-42.</li> </ol>	Weinberger
3/31/06 F	<b>Measures of Quality: Tools for Assessing Quality of Care</b> <u>Learning Objectives</u> <ul style="list-style-type: none"> <li>• Understand the difference between quality improvement and quality reporting</li> <li>• Identify one benefit of quality reporting</li> <li>• Name 2 attributes of a good performance indicator</li> <li>• Know how to retrieve information on performance indicators for specific disease states or pharmacy service activities</li> </ul> <u>Readings:</u> <ol style="list-style-type: none"> <li>1) Curtiss FR, Fry RN, Avey SG. Framework for pharmacy services quality improvement – a bridge cross the quality chasm. <i>Journal of Managed Care Pharmacy</i>. 2004; 10(1): 60-78.</li> </ol>	Hansen
4/3/06 M	<b>Project #4 Introduction and Example</b>	Hansen

DATE	TOPIC, LEARNING OBJECTIVES, ASSIGNED READINGS	SPEAKER
4/5/06 W	<p><b>QA Standards Applicable to the Ambulatory Care Environment</b></p> <p><u>Learning Objectives</u></p> <ul style="list-style-type: none"> <li>• State the purpose of the National Committee for Quality Assurance (NCQA)</li> <li>• Describe HEDIS measures relevant to the ambulatory care environment</li> <li>• State at least one non-dispensing quality measure applicable to the community pharmacy setting, and be able characterize it as to structure, process or outcome</li> </ul> <p><u>Readings:</u></p> <p>1) Capo KM, Rutledge DR. Applying managed care performance measures in community pharmacy-based outcomes research. J Am Pharm Assoc (Wash). 1999 May-Jun;39(3):388-94</p>	Sogol
4/7/06 F	<p><b>QA Standards Applicable to the Institutional Care Environment</b></p> <p><u>Learning Objectives</u></p> <ul style="list-style-type: none"> <li>• Describe the role of JCAHO</li> <li>• Know what types of health care providers and institutions are subject to JCAHO</li> <li>• What has been the history of JCAHO in setting standards, and how has this changed over time?</li> <li>• What power does JCAHO have to set standards?</li> </ul>	Wei
4/10/06 M	<p><b>Outcomes Research and Pharmacy Services</b></p> <p><u>Learning Objectives</u></p> <ul style="list-style-type: none"> <li>• Define outcomes research and understand why it is conducted</li> <li>• Compare and contrast outcomes assessed in a clinical trial to an observational study</li> <li>• Distinguish between processes, intermediate outcomes, and health outcomes</li> <li>• Describe the characteristics of a good outcome measure</li> <li>• Be able to describe outcome measures that would be useful to a specific pharmacy service</li> </ul>	Hansen
4/12/06 W	<p><b>DUR &amp; DUE: Concepts, Terms, Definitions, Tools, and Techniques</b></p> <p><u>Learning Objectives</u></p> <ul style="list-style-type: none"> <li>• Identify the goals of drug use review (DUR) and the steps in the DUR process</li> <li>• Distinguish between retrospective, concurrent, and prospective DUR</li> <li>• Identify the major advantages and disadvantages of retrospective and prospective DUR</li> <li>• Distinguish between DUR, DUE, DRR</li> <li>• Identify and distinguish between norms, standards, and criteria</li> </ul> <p><u>Readings:</u></p> <p>1) Fulda TR, Lyles A, Pugh MC, Christensen DB. Current status of prospective drug utilization review. J Manag Care Pharm. 2004 Sep-Oct;10(5):433-418.</p>	Christensen
4/14/06 F	<b>No Class</b>	
4/17/06 M	<p><b>COST EFFECTIVENESS: A PRIMER FOR THE EVALUATION OF PHARMACY SERVICES</b></p> <p><u>Learning Objectives</u></p> <ul style="list-style-type: none"> <li>• Understand the basic principles of cost-effectiveness analysis</li> <li>• Be able to apply cost/consequence measures to pharmacy services</li> </ul> <p><u>Readings:</u></p> <p>1) Carroll NV. Ch 15: Pharmacoeconomics. <i>Financial Management for Pharmacists: A Decision-Making Approach</i>. Williams &amp; Wilkins: Baltimore, MD, 1998.</p>	Hansen
4/19/06 W	<p><b>Pharmacy Service Cost Effectiveness Exercise</b></p> <p><u>Learning Objectives</u></p> <ul style="list-style-type: none"> <li>• Be able to assess and compare the costs and consequences of competing services</li> </ul>	Hansen
4/21/06 F	<b>Project Work Day</b>	Hansen
4/24/06 M	<b>Project #3 Presentations</b>	Hansen
4/26/06 W	<b>Wrap-up and Review</b>	Hansen
4/28/06 F	<b>Quiz 3</b>	Hansen