

**Syllabus – HP 720**  
**Information Technology and Resources in Health Care**  
**Spring Semester- 2004**

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**Text (Recommended, but not required. Prices from Borders.com website):**

Medical Informatics: Computer Application in Healthcare and Biomedicine  
Shortliffe EH, Perreault LE, Wiederhold G, Fagan LM  
Springer Verlag, 2000 (2<sup>nd</sup> edition)  
\$68.86.

Sams Teach Yourself Microsoft Access 2000 in 10 Minutes  
Faithe Wempen  
\$10.39

Sams Teach Yourself Microsoft Access 2000 in 24 Hours  
Timm Buchanan  
\$19.60

Sams Teach Yourself Microsoft Access 2000 in 21 days  
Paul Cassel  
\$20.99

**Objective**

To provide an overview of informatics as a scientific discipline and to teach practical skills including the use and exploration of the internet for biomedical, health policy and health services research purposes, web page design, creation of web-based forms, primary database construction, database exploration and analysis and the use of spreadsheets. Basic concepts in Web programming will also be covered.

**Time and Location:** Thursdays, 5:30 - 8:00pm, Griffith 208B.

**Grading:**

45% homework and in-class assignments  
35% paper or project  
20% participation

**Lesson Plan:**

Date	Topics
1/15/2004	Overview of Informatics Medical Vocabularies

	Introduction to Web Pages and HTML
1/22/2004	Introduction to Web Based Data sources (HCUP, MEPS, SEER, NCHS, ICPSR) Loading data into Excel and Access Initial explorations of data
1/29/2004	Data Manipulation in MS Access Data cleansing, Fixing the Y2K bug! Update queries Queries
2/5/2004	Queries involving Table joins. Exploring relationships among medications, labs and demographics
2/12/2004	Exploration of NAMCS data. Use of “Make Table” and “append” queries to normalize data
2/19/2004	Further exploration of NAMCS data. Intro to HCUP data.
2/26/2004	Clinical Decision Support – Part 1: Concepts Building your own database in Access -Part I: Data modeling, use of forms
3/4/2004	Spring Break
3/11/2004	Clinical Decision Support – Part II: Mathematics Building your own database in Access -Part II: Reports
3/18/2004	Gathering information on the Web Reputable Medical Web sites Intelligent use of web search engines
3/25/2004	Data Privacy and HIPAA Use of Medline/PubMed
4/1/2004	Creating and Processing HTML Forms Introduction to web-based programming languages Practical exercises with JavaScript
4/8/2004	Evaluating Information Technology
4/15/2004	Database programming topics Geocoding basics
4/22/2004	Presentations of student work

To find out if classes are cancelled due to snow, call 215-596-8800 or listen for the USP snow number, 117.

Copies of this syllabus and assignments will be posted on USP’s electronic reserve system, ERes. To use it: go to <http://eres.usip.edu> Click on **Electronic Reserves and Course Materials**. Choose “WEINER, Mark” from the list of instructors and press the “Go” button. Then select the course HP-720 on the subsequent screen. You will be supplied the course password in class.