Overview of VRPI: The course is divided into seven modules. Each module has assigned reading, audio powerpoints, and a quiz. Some modules also have an exercise. The modules can be taken at any time and in any order. All exercises except the hardware exercise will require a local expert to be assigned by each institution.

Red: Need to capture audio powerpoint from 2007 UMPC Pathology Informatics course.
Blue: Link to outside website or word doc.
Green: Need to link to APIII 2004 archived audio powerpoint
Delete from document after links are created.

Requirements:
1. Pre-test (scored, questions derived from module quizzes)
2. Post-test (scored, questions derived from module quizzes)
3. Module quizzes (scored)
4. Exercises (prn vs mandatory)

Introduction to the Virtual Rotation in Pathology Informatics
Jill Hagenkord, MD

Pathology in the 21st Century
Michael Becich, MD, PhD

Module I: Fundamentals in General Computing
A. Hardware—What's inside the box?
   1. Practical Pathology Informatics, Chapter 2: Hardware, p19-49.
   2. Audio Powerpoints
      a. Basic Computer Architecture: From Bytes to Interfaces (APIII 2004)
      b. Introduction to Hardware and Software, Jeff Fine, MD
   4. Hardware exercise (video), Jon Ho, MD
B. Software
   1. Practical Pathology Informatics, Chapter 3: Software, p51-76.
C. Networking, the Internet, and Communication Standards
   1. Practical Pathology Informatics, Chapter 4: Networking and the Internet, p83-115.
   2. Practical Pathology Informatics, Chapter 10: Electronic Interfaces and Data Exchange, p287-297.
   3. Practical Pathology Informatics, Chapter 11: Case Identification by Diagnosis, p303-323.
   4. Audio Powerpoints
      a. Networking and the Internet, Jon Ho, MD
      b. Files, Formatting, and Mark Up (APIII 2004)
      c. Data Encoding and File Formats, Anil Parwani, MD, PhD
      d. Data Models, Common Data Elements, and Standard Vocabularies, Rebecca Crowley, MD, MS
D. Fundamentals in General Computing Quiz

Module II: Digital Imaging and Telepathology
A. Digital Imaging
   1. Practical Pathology Informatics, Chapter 8: Digital Imaging in Anatomic Pathology, p233-261.
   2. Audio Powerpoints
      a. Digital Imaging in Pathology I: Image Acquisition and Processing (APIII 2004)
      b. Digital Imaging, Drazen Jukic, MD
      c. Basic Image Processing for Pathologists, Jon Ho, MD
B. Telepathology/Telemicroscopy
VIRTUAL ROTATION IN PATHOLOGY INFORMATICS

1. Practical Pathology Informatics, Chapter 9: Video Microscopy and Telemicroscopy, p265-281
2. Audio Powerpoints
   b. Whole Slide Imaging and Telepathology, Anil Parwani, MD, PhD
C. Digital Imaging Exercise
D. Digital Imaging and Telepathology Quiz

Module III: Literature Searching
A. Google Tutorials
   1. Basic Search
   2. Advanced Search
   3. Google Scholar
B. NCBI and PubMed Tutorials
   1. About NCBI
   2. Basic and Advanced Search of PubMed
C. Literature Search Quiz

Module IV: Data Management, Mining, and Analysis
A. Practical Pathology Informatics, Chapter 5: Databases, p121-166.
B. Audio Powerpoints
   1. Computerized Databases (APIII 2004)
   2. Databases, Rebecca Crowley, MD, MS
C. Database Quiz

Module V: Laboratory Information Systems
A. Practical Pathology Informatics, Chapter 6: Pathology LIS: Relationship to Institutional System, p173-205.
B. Practical Pathology Informatics, Chapter 7: Evaluating Pathology Information Systems, p207-231.
C. Audio Powerpoints (APIII 2007)
   1. Evaluation of Needs (Do I Need a New LIS?), Mark Tuthill, MD
   2. Selection of an LIS: Pitfalls and Recommendations, Walter Henricks, MD
   3. LIS Implementation, Kathy Davis, BS, MT
   4. Strategies for Long Term Evolution and Management, Ashokkumar Patel, MD
   5. Compliance with Regulatory Agencies, Walter Henricks, MD
   6. The LIS and the Hospital Chief Information Officer (CIO), Sean O’Rourke, MS
   7. The Perspective of the LIS Vendor, Sidney Goldblatt, MD
D. LIS Quiz

Module VI: Security, Privacy, and Confidentiality of Laboratory Data
A. Practical Pathology Informatics, Chapter 12: External Regulations Pertinent to LIS Management, p325-350.
B. Audio Powerpoint: Information Sharing in the HIPPA World, Sharon Winters, MS
C. Security Quiz

Module VII: Basic Software Tools for Pathologists
A. Microsoft Powerpoint
   1. Powerpoint tutorial
   2. Powerpoint exercise: Build a presentation and a poster using Powerpoint
B. Microsoft Excel
   1. Excel tutorial
   2. Excel exercise: Balance your check book, plan a wedding, or organize research data.
C. Microsoft Word
VIRTUAL ROTATION IN PATHOLOGY INFORMATICS

1. Word tutorial