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# MEDICAL DECISION-MAKING COMPONENT LOGISTICS Schedule – Content – Readings/Assignments

Information Retrieval (Ask and Acquire) Thread				
August 4 11 AM-12 Noon	Lecture (1 hour)  The Value of Uncertainty  The decision-making context  Differential Diagnoses  Introduce Computer Session #1 Option and Assignment #1	Readings: Syllabus (required) Background The Questions The Search: Basic Concepts		
August 8 9-10 AM	Lecture (1 hour)  The Information Cycle  O Probability Laws, Bayes Probabilistic Reasoning O Question-Generation Targeting information resources	Articles – found in syllabus (required) Chances Are (New York Times Reprint) Slaying of a Beautiful Hypothesis by Facts  Users' Guides (strongly recommended) – The MANUAL		
August 5 1:30-2:30, 2:30-3:30, 3:30-4:30, or 4:30-5:30 PM	<ul> <li>Computer session #1 (1 hour) – OPTIONAL         Introduction to the Information Resource Environment         <ul> <li>Overview of Environment</li> <li>Question generation - Apply MDM principles to MDC-Down Syndrome session (August 6, 1-3 PM)</li> <li>Introduction to PubMed and OVID</li> </ul> </li> </ul>	Chapters 1-4 (pages 3-58)  User's Guides (optional) – The ESSENTIALS Chapters 1-4 (pages 1-76)  Assignment (required) Assignment #1-turn in at Computer Session #2		
August 19 1-3 PM or Aug 22 3-5 PM or August 23 1-3 PM or 3-5 PM	Computer session #2 (2 hours) - MANDATORY  Basic and Advanced MEDLINE Searching  Review and Collect Assignment #1  PUBMED / OVID distinctions  Introduction to Longitudinal Cases Resources  Advanced background resources  Psychosocial literature databases  You are the Filter			

Biostatistics and Clinical Epidemiology (Appraise) Thread					
August 5 9AM-10 AM August 8 1PM-2PM	Lecture (1 hour)  Introduction to Biostatistics  O Hypothesis generation and testing O Sampling O Statistical testing O Statistical significance vs. Clinical Significance O Confidence Intervals	Readings: Syllabus (required) Fundamentals of Epidemiology and Biostatistics  Users' Guides (strongly recommended) – The MANUAL Chapter 5 (pages 50.64)			
August 9 11AM-12 Noon and 1-2 PM	Lectures (2 hours total)  Observational Studies, Biostatistics and Epidemiology  Confounding Cohort studies Case-control studies Cross-sectional studies Introduce Assignment #2 (covers lectures)	Chapter 5 (pages 59-64) Chapter 10.1 (partial) (Pages 209-215) Chapter 10.2 (pages 221-229) Chapter 12 (pages 363-381) Chapter 18 (pages 509-520)  User's Guides – The ESSENTIALS (optional) Chapter 5 (pages 77-84) Chapter 9 (pages 141-168)			
August 11 1-3 PM or 3-5 PM	Small Group session #1 (2 hours)  Observational Studies and Basic Biostatistics  Review and Collect Assignment #2  Apply principles from lectures to problem sets and cases	Chapter 13 (pages 223-238)  Assignments (required) Assignment #2 – turn in at Small Group Session #1			

Diagnostic Reasoning (Apply) Thread				
August 15 9-10 AM and 10-11 AM	Lectures (2 hours)  Diagnostic Reasoning-I and II  O Prevalence/Incidence O Sensitivity / Specificity / Accuracy / Precision / Likelihood Ratios / Predictive Values O Diagnostic Question Generation O Gold standards and blinded-assessment O Probabilistic Application O Introduce Assignment #3 (covers lectures)	Readings: Syllabus (required) Fundamentals of Diagnostic Interpretation  Article (required) Mammogram Math (NY Times reprint)  Users' Guides (strongly recommended) – The MANUAL		
August 16 1-3 PM or 3-5 PM	Small Group session #2 (2 hours)  Diagnostic Reasoning  Review and Collect Assignment #3  Apply principles from lectures to problem sets and cases  Receiver Operator Characteristic Curves (ROC)  Introduce Assignment #4 (Covers MDC Colon Cancer)	Chapters 15-16 (pages 407-438) Chapter 17.4 (pages 491-505)  User's Guides – The ESSENTIALS (optional) Chapters 11-12 (pages 179-222)  Assignments (required) Assignment #3 – turn in at Small Group Session #2 Assignment #4 – turn in at Small Group Session #3		
August 24 3-4 PM or 4-5 PM	Small Group session #3 (1 hour)  Diagnostic Reasoning Applied to Colon Cancer  ○ Apply MDM principles to MDC-Colon Cancer session (August 25 1-3 PM)  ○ Review and Collect Assignment #4			