

Appendix A

University of Pittsburgh
School of Health and Rehabilitation Sciences
Department of Health Information Management

“Mini Syllabus” and Course Outline

Module: Genomics and Personalized Care in Health Systems

Dates: March 24 – Lecture
March 29 – Lab
April 7 – Lecture
April 12– Lab

Presenter: Bailee Ludwig

Module Supervisors: Leming Zhou, PhD; Valerie Watzlaf, PhD, RHIA, FAHIMA

Module Description

This module will focus on a general introduction to genomics and genomic information security. It will consist of two lectures and two labs conducted during the normally scheduled QM lecture and QM lab. This is a very brief introduction to a very complex and important subject. For more information, students are encouraged to take Dr. Leming Zhou’s Genomics and Personalized Care in Health Systems (HRS 1425) 3-credit course.

Student Objectives

Upon completion of this module, students should be able to:

1. Explain the fundamental structure of DNA and eukaryotic gene structure
2. Explain the central dogma of molecular biology
3. Demonstrate the skills of performing searches on several molecular databases
4. Describe the different types of molecular databases and explain their advantages and disadvantages
5. Explain the importance of protecting personal genomic information
6. Understand the importance of preserving the integrity of genomic information to prevent genetic discrimination