Course Syllabus:

Epidemiology and Analysis of Epidemiological Data
Semester 1: 2016
Haifa University School of Public Health
Global Health Leadership and Administration Program
Haifa, Israel

A. Course Introduction:

Epidemiology is one of the core foundations of public health practice. A strong foundation in epidemiology, analysis of epidemiological data and critical analysis of the epidemiological literature is crucial to effectively lead and administrate global health systems. This course offers an introduction to the principles, concepts, and methods of epidemiologic research. The course will introduce the basic measures used in epidemiology and will discuss epidemiologic study design and analysis. The course will also address special topics such as outbreak investigations, screening, and the role of epidemiology in public health.

B. Course Schedule:

Lecture hours- Thursday 11:15 - 13:45 Office hours- Thursday after class; Sundayafternoon, or by appointment

C. Course Website:http://1drv.ms/1O84dJv

D. Course Instructor:

YonahAmster MD MPH (Course Coordinator) Email: eamster@post.harvard.edu
Cell: 054-356-5855

Eric is an epidemiologist and physician specializing in environmental and occupational medicine. He studied environmental and occupational health at the Harvard School of Public Health where he completed an MPH and post-doctoral training in environmental epidemiology. He came to Israel on a Fulbright Scholars grant. His research interests include air pollution, heavy metal exposure and the built environment.

E. Lecture Topics:

Lecture	Topics
1	Introduction to epidemiology
2	Measuring morbidity and mortality

3	Measuring disease risk**Problem Set 1**
4	Study Design 1/4: Cross-sectional and Ecological studies
5	Study Design 2/4: Case-control
6	Study Design 3/4: Cohort studies **Problem Set 2**
7	Study Design 4/4: Clinical trials
8	Error in epidemiology: misclassification, bias, confounding
9	Analysis of epidemiological data. Controlling for confounding **Problem Set 3**
10	Special topics: Infectious disease epidemiology -vaccinations -outbreaks
11	Special topics: Social epidemiology **Article Review Exercise**
12	Special topics: Epidemiology to evaluate health services and health economics
13	Course review and conclusion Review problem sets and practice test questions

F. Course Textbook:

- **Leon Gordis. Epidemiology. 5th edition. Elsevier**

There are multiple copies of the text on hold at the library reserve desk. The text is available for purchase and rent from the publisher and Amazon. Both electronic and paper formats are available. The cheapest option I found was renting a Kindle eversion through Amazon

G. Grading:

The goal of the course is to go beyond simple memorization of facts. While core concepts should be memorized, grading will focus on integration and application of epidemiological principles in addition to multiple choice examination. Students will also practice critical review of the public health literature and application of the concepts discussed in the course to actual public health issues. To this end the course grade will be based on the following items:

- 35% In-class article review and problem sets
- 65% Multiple-choice final exam including problem sets of analysis of epidemiological data.