Instructor: Bin Xie, Ph.D.
Office Hours: by appointment
Office: 180 E Via Verde, Suite 100, San Dimas, CA 91773
Phone: (909) 607-1076
Email: bin.xie@cgu.edu

Class Meets: Fall Semester, Friday 9:00-11:50 am. Location: McManus 35

Course Description:
This course is designed to provide an overview of the epidemiologic aspects and prevention approaches for major chronic diseases and conditions as well as infectious diseases that face the U.S. population and the population of other countries. Concepts and methods with focuses on disease epidemiology and prevention strategies will be discussed.

Course Objectives:
At the end of this course, students should be able to:
1. understand main epidemiological characteristics of the major infectious diseases and chronic diseases and conditions;
2. become familiar with the distribution and impact of the major infectious diseases and chronic diseases and conditions;
3. discuss contemporary approaches to the prevention and control of epidemic or endemic transmission of the major infectious diseases, and prevention and control of the major chronic diseases and conditions from the public health perspective;
4. understand common applications of the basic epidemiological concepts and methods to chronic and infectious disease prevention and control programs;
5. develop presentation skills
6. read and critique epidemiologic studies addressing specific chronic and infectious diseases

Prerequisites
CGH 302 (Principles of Epidemiology), Knowledge of basic epidemiology or consent of the instructor

Recommended Textbook:

Other Material: Class handouts of PowerPoint slides and published articles.

Course Requirement

Class Participation: Active involvement in class activities is expected. Students are expected to do their weekly reading assignment and participate in the class discussions. Those who do not arrive to class prepared will lose points on their class participation portion of the grade. In addition, the classroom discussions and other readings will be represented on the quizzes and so it is in the students’ best interest to take part.

Quizzes: Three in-class quizzes will be administered. Quizzes will be given at the start of class and therefore, promptness is absolutely essential. If you arrive late to class, you will have less time to complete the exam. Quizzes will cover the material from previous lectures. You may use calculators, but no other hand-held devices whatsoever. You will NOT be permitted to use books or notes for in-class quizzes. Sharing calculators will not be permitted so please arrive to class prepared. Make up quizzes will not be given except under the most extreme circumstances, the definition of which is left to the instructor’s discretion (documentation may be required).

QUIZ MATERIAL MAY INCLUDE ANYTHING FROM CLASS LECTURE/DISCUSSION AS WELL AS MATERIAL FROM THE ASSIGNED CHAPTERS.

Final Presentations: Students will work individually or in small groups of 2-3 (depending on the class size) and then give oral presentations in class at the end of the semester. The presentations should focus on specific disease entities or types and take an integrative approach which applies the principles presented in the course. Topics will be assigned although you are welcome to trade with another student if such a trade is mutually agreed upon. Specific guidelines will be provided for the final presentations including guidelines for the outline, references, citation style, number of slides and corresponding written work. Two weeks before the presentation, students should present a short list (1-2) of readings for other students to read on the topic before it is presented. They should also present a list of questions or topics that will be discussed in their presentation. Grading criteria will be discussed several weeks prior to the final presentations. All students are expected to attend all presentations and to complete all evaluation forms. Failure to attend any presentation or to complete any form will result in a 10% reduction in presentation score for each absence or form left incomplete.

Grading: The final grade will be determined by the following:

Three In-class quizzes at 10% each (30%)
Final presentation (40%)
Class participation (30%).

Class grades will be based on the following:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.85 – 4</td>
<td>A</td>
</tr>
<tr>
<td>3.60 – 3.84</td>
<td>A-</td>
</tr>
<tr>
<td>3.25 – 3.59</td>
<td>B+</td>
</tr>
<tr>
<td>2.90 – 3.24</td>
<td>B</td>
</tr>
<tr>
<td>2.60 – 2.87</td>
<td>B-</td>
</tr>
<tr>
<td>2.25 – 2.50</td>
<td>C+</td>
</tr>
<tr>
<td>1.90 – 2.24</td>
<td>C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>93 – 100</td>
<td>A</td>
</tr>
<tr>
<td>90 – 92</td>
<td>A-</td>
</tr>
<tr>
<td>87 – 89</td>
<td>B+</td>
</tr>
<tr>
<td>83 – 86</td>
<td>B</td>
</tr>
<tr>
<td>80 – 82</td>
<td>B-</td>
</tr>
<tr>
<td>77 – 79</td>
<td>C+</td>
</tr>
<tr>
<td>73 – 76</td>
<td>C</td>
</tr>
<tr>
<td>70 – 72</td>
<td>C-</td>
</tr>
</tbody>
</table>

Academic Accommodations:

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to the instructor as early in the semester as possible. DSP is located in Office of Dean and Student Affair, Harper Hall East (160 East 10th street) and is open from 8:30 a.m. to 5:00 p.m., Monday through Friday. The phone number is (909) 607-9448.
SCHEDULE OF CLASSES

Week 1 (September 3) Introduction to Chronic Disease Epidemiology
- Lecture
- Video:
  - GLOBAL PULSE: Obesity Going Global (2/26/2010)
- Reference Chapter(s): Remington PL (2010), Chapters 1 & 2

Week 2 (September 10) Chronic Disease Surveillance
- Lecture
- Paper Discussion:
- Reference Chapter(s): Remington PL (2010), Chapters 3 & 4

Week 3 (September 17) High Blood Pressure, High Blood Cholesterol, Diabetes & Cardiovascular Diseases
- Lecture
- Video: Blood Sugar & Fears
- Discussion:
- Reference Chapter(s): Remington PL (2010), Chapters 10, 11 & 12

Week 4 (September 24) Mental Disorders (Depression & Schizophrenia)
- In-class Quiz #1
- Lecture
- Paper Discussion:

• **Reference Chapter(s):** Remington PL (2010), Chapter 16

### Week 5 (October 1) Cancer Disparity and Prevention

- **Guest Lecture by Zul Surani**
- **Paper Discussion:**

• **Reference Chapter(s):** Remington PL (2010), Chapter 14

### Week 6 (October 8) Tobacco & Alcohol Use

- **Guest Lecture by Dr. C. Anderson Johnson**
- **Paper Discussion:**

• **Reference Chapter(s):** Remington PL (2010), Chapter 5

### Week 7 (October 15) Physical activity, Diet & Obesity

- **Guest Lecture by Dr. Kim Reynolds**
- **Paper Discussion:**

• **Reference Chapter(s):** Remington PL (2010), Chapters 6, 7 & 9
Week 8 (October 22) Introduction to Infectious Disease Epidemiology

- In-class Quiz #2
- Lecture
- Video:
  - 1918 Flu
- Reading:
  - Perspectives on influenza evolution and the role of research. Forrest HL & Webster RG. Animal Health Research Reviews 11(1); 3–18.
- Reference Chapter(s): Nelson KE (2007), Chapter 3

Week 9 (October 29) Cancer Etiology and Epidemiology

- Guest Lecture by Dr. Sophia Wang
- Paper Discussion:
- Reference Chapter(s)

Week 10 (November 5) Agent-Host-Environment

- Guest Lecture by Dr. Joseph Lyons
- Paper Discussion:

**Reference Chapter(s):** Nelson KE (2007), Chapter 2 and 13

**Week 11 (November 12) Outbreak Investigation**
- Lecture
- Video:
  - SARS: The True Story
  - Responding Outbreaks
- Reading:
- Reference Chapter(s): Nelson KE (2007), Chapter 4

**Week 12 (November 19) HIV/AIDS Epidemiology**
- In-class Quiz #3
- Guest Lecture by Dr. Paula Palmer
- Paper Discussion:
- Reference Chapter(s)

**Week 13 (November 26) Thanksgiving Holiday, No Class**

**Week 14 (December 3) Vaccines and Vaccine-Preventable Diseases**
- Guest Lecture by Dr. Joseph Lyons
• **Paper Discussion:**

• **Reference Chapter(s):** Nelson KE (2007), Chapter 10 and 11

**Week 15 (December 10) Final Presentations**

**Week 16 (December 17) Final Presentations**