University of California, Los Angeles
School of Nursing

Course Number and Title: N50 Fundamentals of Epidemiology

Time / Room: Summer, Monday and Wednesday (09:30 am – 11:50 am) / Virtual class

Number of Credits: 4 Credits; 280 minutes each week

Prerequisite Courses: None

Course Description:
Epidemiology is an interdisciplinary science with the goal of identifying and describing patterns of disease occurrence, identifying determinants of disease, and evaluating disease prevention and health care treatment efforts. With its focus on human populations, epidemiology is directly linked with public health research, policy, and practice. This course provides an introduction to the fundamental definitions, concepts, methods, and critical thinking used in epidemiologic study. This course is designed to lay the foundation for future study to evaluate factors related to health outcomes in human populations using epidemiologic principles. Letter grading.

Course Objectives:
Upon success completion of the course, the student will be able to:
1. Estimate extent of disease in human populations using epidemiologic measures (AACN Essentials III, VII).
2. Apply epidemiological principles in assessing transmission, development, and prognosis of disease in human populations (AACN Essentials III, VII, IX).
3. Evaluate contribution of epidemiological findings applied at the level of the individual, community, health care delivery system, and to public health and public policy (AACN Essentials IV, VII, IX).

Skills/Competencies:
1. Critical thinking related to epidemiology and its application to a population-based approach to public health and nursing practice.
2. Enhanced assessment and analytic skills necessary for applying evidence to clinical practice in culturally diverse settings with families, cohorts, and larger communities.

Teaching Methods:
Remote lecture/discussion through UCLA zoom (https://ucla.zoom.us/j/99853053767, Passcode: 198110) and CCLE.

Faculty Responsible for Course:
Jian Li, M.D., Ph.D. (Public Health)
Professor
Office: CHS 73-251
Office Hours: 10:30 am – 11:50 am,
              or by appointment

Required Textbook:
David D Celentano, Moyses Szklo (2018). Gordis Epidemiology. 6th edition. Elsevier, Philadelphia. Paper ISBN: 978-0-323-55229-5.

CCLE – Moodle:
Course syllabus and supplemental course materials and resources will be posted on the course website on Moodle. Students use your BOL ID and password to access: https://ccle.ucla.edu. All course materials for N50 will be posted on Moodle. Please check the site frequently for class communication. Due to the nature of remote learning, it is your responsibility to print what you may want. Every effort will be made to have PPT handouts posted the evening before lectures. You will also use Moodle to complete and/or submit your course assignments.

Grading Criteria:
Per School of Nursing policy, the following is the scale used to compute the course grade. A minimum score of 74.00% is required to pass. Grades will be posted on **MyUCLA**.

A+	97.00 – 105.00%
A	94.00 – 96.99%
A-	90.00 – 93.99%
B+	87.00 – 89.99%
B	84.00 – 86.99%
B-	80.99 – 83.99%
C+	77.00 – 79.99%
C	**74.00 – 76.99% (Minimum Passing Score)**
C-	70.00 – 73.99%
F	< 70.00%

Course Evaluation:
Homework 1	15% of final grade
Homework 2	15% of final grade
Midterm Exam	35% of final grade
Final Exam	35% of final grade + 5 points extra credit
Total	100% + 5 points extra credit

Assignments Due:
Students are expected to work **independently** to complete the required questions as assigned, and to submit digital (**MS Word** or **PDF**) version of the homework and exams, including all mathematical work, via the CCLE before the due time listed below.

Homework 1	June 30, 2021, Wednesday, 09:30 pm
Homework 2	July 21, 2021, Wednesday, 09:30 am
Midterm Exam	July 12, 2021, Monday, 11:59 pm
Final Exam	July 28, 2021, Wednesday, 11:59 pm

Late Assignments:
All assignments will lose 10% of highest possible grade for each 24-hour late beyond due date/time. So, if the deadline is July 21, 09:30 am and you submit your paper at 09:31 am, the highest grade you can earn is 90%. If you submit it at 09:30 am on July 22, the highest grade you can earn is 80%, etc. It is recommended that you turn in your assignment an hour or more before the deadline.

Course Etiquette:
See the video 'Course etiquette for remote learning' upload to CCLE.

Guideline for Homework

1. The homework will be posted on
Homework 1	Monday, 11:50 pm
Homework 2	Monday, 11:50 am

2. Please submit digital (**MS Word** or **PDF**) version of the homework, including all mathematical work, via the CCLE. The submission due time will be
Homework 1	Wednesday, 09:30 pm
Homework 2	Wednesday, 09:30 am

3. You are expected to work **<u>independently</u>** to complete the required questions on the homework.

4. There will be 15 questions including multiple-choice questions (1 point per question) and computational questions (0.5 point for calculation and 0.5 point for result per question). For the latter, please **<u>show calculations</u>**.

5. Calculators are allowed to use.

6. Review relevant teaching materials and assigned textbook chapters.

7. The grading is based on correctness.

Guidelines for Midterm Exam (take-home)

1. The take-home midterm exam will be posted on Monday, 08:00 am.

2. Please submit digital (**MS Word** or **PDF**) version of the exam, including all mathematical work, via the CCLE. The submission due time will be Monday, 11:59 pm.

3. You are expected to work **independently** to complete the required questions on the exam.

4. There will be 35 questions including multiple-choice questions (1.0 point per question) and computational questions (0.5 point for calculation and 0.5 point for result per question). For the latter, please **show calculations**.

5. Calculators are allowed to use.

6. Review relevant teaching materials and assigned textbook chapters.

7. The grading is based on correctness.

Guidelines for Final Exam (take-home)

Part A

1. The take-home final exam will be posted on Wednesday, 08:00 am.

2. Please submit digital (**MS Word** or **PDF**) version of the exam, including all mathematical work, via the CCLE. The submission due time will be Wednesday, 11:59 pm.

3. You are expected to work **independently** to complete the required questions on the exam.

4. There will be 35 questions including multiple-choice questions (1.0 point per question) and computational questions (0.5 point for calculation and 0.5 point for result per question). For the latter, please **show calculations**.

5. Calculators are allowed to use.

6. Review relevant teaching materials and assigned textbook chapters.

7. The grading is based on correctness.

Part B

1. This is **extra credit** (5 points), and it is **your own decision** to take it or not.

2. The extra credit will be posted on Wednesday, 08:00 am.

3. Please submit digital (**MS Word** or **PDF**) version of the extra credit, including all mathematical work, via the CCLE. The submission due time will be Wednesday, 11:59 pm.

4. You are expected to work **independently** to complete the questions.

5. A scientific article published in an academic journal will be provided. After reading this article, there will be 3 open-ended questions (1.0 point per question) and two computational questions (0.5 point for calculation and 0.5 point for result per question). For the former, please **write down the answers** which could be found from the article; for the latter, please **show calculations**.

6. Calculators are allowed to use.

7. Review relevant teaching materials and assigned textbook chapters.

8. The grading is based on correctness.

N50 Fundamentals of Epidemiology – Schedule and Readings Summer (09:30 – 11:50 am)

Time	Date	Topic	Reading
Week 1		Course Logistics Introduction to Epidemiology Data sources Measures of Morbidity	Gordis, Chap. 1, 3
		Measures of Mortality	Gordis, Chap. 4
		In-class discussion (10:30-11:30 am) Office hour (11:30-11:50 am)	Gordis, Chap. 1, 3, 4
Week 2		Juneteenth Holiday: NO CLASS **Homework 1 Distributed, at 11:50 pm**	
		Homework 1 Due, at 09:30 pm Guest Lecture: Dynamics of Disease Transmission (by Robert Kim-Farley)	Gordis, Chap. 2
Week 3		Independence Day Holiday: NO CLASS	
		Natural History of Disease	Gordis, Chap. 6
		In-class discussion (10:30-11:30 am) Office hour (11:30-11:50 am)	Gordis, Chap. 2, 6
Week 4		Midterm Exam (take home) **Distributed, at 08:00 am** **Due, at 11:59 pm**	
		Study Designs: Ecologic, Cross-Sectional, Case-Control, Cohort, Randomized Trials	Gordis, Chap. 7, 8, 9, 10
Week 5		In-class discussion (09:30-10:30 am) Diagnostic and Screening Tests (10:30-11:30 am) In-class discussion (11:30-11:50 am) **Homework 2 Distributed, at 11:50 am**	Gordis, Chap. 7, 8, 9, 10 Gordis, Chap. 5 Gordis, Chap. 5
		Homework 2 Due, at 09:30 am Estimating Risk, Attributable Risk Causal Inference, Bias, Confounding, Interaction	Gordis, Chap. 12, 13, 14, 15
Week 6		In-class discussion (09:30-11:30 am) Office hour (11:30-11:50 am)	Gordis, Chap. 12, 13, 14, 15
		Final Exam (take home) **Distributed, at 08:00 am** **Due, at 11:59 pm**	

Course Policies

A. Academic Integrity
As a student and member of the UCLA community, you are expected to demonstrate integrity in all of your academic endeavors. If you have any questions related to academic integrity, please visit the Office of the Dean of Students website: http://www.deanofstudents.ucla.edu/

Required Reading: Student Guide to Academic Integrity.
https://deanofstudents.ucla.edu/academic-integrity

B. Preparation
This course consists of collaborative learning efforts to maximize learning. As with any collaborative effort, we each have the responsibility to prepare and participate in order to successfully accomplish the goals. Please set aside specific times each week for class preparation (approximately 2 hours of preparation for each hour of class per week). An example of being prepared is that you complete readings before the class meeting and are ready to ask relevant questions.

C. Professionalism
Your demeanor, attendance, punctuality, attitude, preparedness, along with your willingness to grow and learn (critical and contextual analysis, sharing ideas with classmates, and clarity of thought) are all reflections of your professionalism. Please avoid using any personal technological devices (cell phone, laptop, Blackberry, music player) during all classroom activities.

D. Policy on Exam
Unexcused absence from an examination (e.g., instructor not notified in advance of the absence, and it needs to be an approved absence) results in an automatic failure in that exam. Failure to arrange (or failure to complete) a make-up exam within 24 hours past examination date will result in a "0" score for that examination.

E. Accommodations
If you need any accommodation for a disability, please contact the Office for Students and Disabilities at (310) 825-1501 or register at www.osd.ucla.edu. Disabilities may require modification of exam environment. All arrangements must be made prior to the examinations. The School of Nursing is committed to working with all students to create a successful learning environment. Please notify a course faculty member if you wish to obtain additional information. Office for Students with Disabilities A255 Murphy Hall: (310) 825-1501, TDD (310) 206-6083.

F. UCLA Counseling and Psychological Services
Counseling and Psychological Services (CAPS) is a multidisciplinary student mental health center for the UCLA campus. CAPS supports the academic and student development missions of the University and the Division of Student Affairs. They are here to support your mental health needs as you pursue your academic goals. Sometimes students find themselves in need of assistance to learn how to deal with various psychological and social issues. CAPS provides a safe and confidential place to talk with a professional about concerns or problems, no matter how minor or serious, which might interfere with personal growth or academic achievement. Their services can be obtained by calling (310) 825-0768 or at the website www.counseling.ucla.edu.

G. Technical Assistance
DGIT Support: https://it.uclahealth.org/about/dgit/dgit-support