

HCA 202/PBH 202-1003: Epidemiology: ONLINE COURSE

Instructor Information

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And by appointment (email to request), as needed. Most issues will be resolved via email.

Course Information

Catalog Description:

Provides an introduction to epidemiological techniques and strategies. The investigation of infectious disease outbreaks will be discussed and contemporary epidemics will be highlighted. Other foci will be uses, strengths and weaknesses of epidemiological study designs and the appropriate interpretation of results.

Online Course Narrative:

This introductory course covers the main principles of epidemiology, the study of the distribution and determinants of health and disease in human populations. Starting with the foundational concepts and terminology associated with this field, this course will explore important historical developments in epidemiology, the difference between descriptive and analytical epidemiology, the major study designs of epidemiology, some basic associated statistical techniques and the concept of causality. Emphasis will be on application of epidemiological concepts in public health and health care administration practice.

Text(s) for Course:

REQUIRED:

Merrill, R. M. (2021). *Introduction to epidemiology* (8th ed.). Burlington, MA: Jones & Bartlett Learning.

NOTE: You are also expected to go through the material presented on the various pages in the online modules, including additional readings, videos, PowerPoints and practice quizzes.

Course Learning Outcomes (CLOs):

Upon completion of this course, students will be able to:

1. Explain the fundamental role of epidemiology and associated key terms
2. Apply the concepts of epidemiology to the clinical and public health environment considering the history and contributions of major individuals in this scientific field
3. Apply descriptive, analytical, field, and clinical epidemiology in research while evaluating experimental studies

4. Explain the concepts involved in causality and chronic disease as they apply to epidemiology
5. Describe the characteristics of descriptive, analytical, field, and clinical epidemiology

University Undergraduate Learning Outcome (UULOs) Addressed:

<https://www.unlv.edu/provost/gen-ed/uulo>

1. 1.4. Transfer knowledge and skills gained from general and specialized studies to new settings and complex problems.
2. 2.4 Recognize the complexity of problems, and identify different perspectives from which problems and questions can be viewed.
3. 3.1 Demonstrate general academic literacy, including how to respond to the needs of audiences and to different kinds of rhetorical situations, analyze and evaluate reasons and evidence, and construct research-based arguments using Standard Written English.
4. 4.2 Respond to diverse perspectives linked to identity, including age, ability, religion, politics, race, gender, ethnicity, and sexuality; both in American and international contexts.
5. 5.6 Apply ethical concepts and theories to specific ethical dilemmas students will experience in their personal and professional lives.

Healthcare Administration Program Outcomes Addressed:

<https://www.unlv.edu/degree/bs-health-care-admin-policy>

Students are able to describe the distribution and determinants of health and disease, including the influences of individual behavior, the environment, and health care technology in the prevention and progression of disease, as well as the restoration of health.

Introductory Public Health Learning Objectives; Bachelor of Science in Health Care Administration and Policy
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
7. Explain effects of environmental factors on a population’s health
8. Explain biological and genetic factors that affect a population’s health
9. Explain behavioral and psychological factors that affect a population’s health
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health)

Healthcare Administration Competencies (PHC) Addressed:

1. HCAP A1. Health care Issues and Trends (Demonstrate a broad knowledge of the health care industry and trends involved in provision, coverage, and access to care).
2. HCAP A3. Populations’ health and status assessment (Identify basic theory, concepts and models of health promotion, disease causation and prevention; analyze trends using primary and/or secondary community and health status data).
3. HCAP D1. Personal and Professional Ethics (Adhere to ethical personal and business principles; exhibit ethical behaviors).
4. HCAP E3. Systems Thinking (Understand potential impacts and consequences of decisions in a wide variety of situations).
5. HCAP E5. Ability to assess needs of communities and have a visionary perspective for the own organization.
6. *HCAP C1. Interpersonal Communication (Build collaborative relationships).

7. *HCAP C2. Presentation Skills (Demonstrate effective oral communication and presentation skills).
8. *HCAP C3. Working in Teams (Create, participate in, and lead teams).
9. *HCAP C4. Writing Skills (Prepare effective written and business communications).

Objective Mapping

Course Objective	Competency/ UULO/HCALOs	Level*	Teaching Method	Assessment Method
1. Explain the fundamental role of epidemiology and associated key terms.	1, 2, 3, 4, / 1, 2, 4, 5, 6, 7, 9	Novice	Textbook Videos PDFs	Discussions Assignments Quizzes
2. Apply the concepts of epidemiology to the clinical environment considering the history and contributions of major individuals in this scientific field.	1, 2, 3, 4, / 1, 2, 4, 5, 6, 7, 9	Novice	Textbook Videos PDFs	Discussions Assignments Quizzes
3. List the five major disease categories and develop health status measures.	1, 2, 3, 4, / 1, 2, 4, 5, 6, 7, 9	Novice	Textbook Videos PDFs	Discussions Assignments Quizzes
4. Apply descriptive, analytical, field, and clinical epidemiology in research while evaluating experimental studies.	1, 2, 3, 4, / 1, 2, 4, 5, 6, 7, 9	Novice	Textbook Videos PDFs	Discussions Assignments Quizzes
5. Describe the characteristics of descriptive, analytical, field, and clinical epidemiology.	1, 2, 3, 4, / 1, 2, 4, 5, 6, 7, 9	Novice	Textbook Videos PDFs	Discussions Assignments Quizzes

Grading Components

16-Week Schedule

Assessment Method	Number	Points each	Total	Percent
Misc. Start of Semester	varies	varies	20	2.5%
Discussions	10	20	200	25%
Quizzes	8	30	240	30%
Individual Assignments/Projects	12	20	240	30%
Final Reflection Paper	1	100	100	12.5%
Total			800	100%

The professor reserves the right to modify the schedule and adjust requirements and evaluation criteria for this course if necessary. Announcements regarding changes to the syllabus will be made through WebCampus and are your responsibility.

Assessment Overview

Quizzes (8* 30 points each)

- Includes 15 multiple choice and true/false types of questions.
- Includes material from the assigned module activities and textbook readings.
- Quizzes will be open for six days prior to the due date listed on your course schedule.
- Due on Sundays (by 11:59 p.m. PST) of the assigned module weeks.
- You will have 60 minutes to complete the quiz.
- You will have one (1) attempt.

Discussions (10* 20 points each)

You must first post your answer(s) before you can see the other students' posts. Submit your initial post(s) early in the week.

- Refer to the **Discussion Rubric**.

Initial Post (1 post, 14 points)

- Initial posts, responding to prompts and/or questions posed each week, must be at least 250 words in length or approximately two paragraphs.
- Be sure to answer all parts of the prompt for each discussion.
- Posts require thoughtful responses that demonstrate your understanding of the material presented in the course, including the textbook.
- Use references to support your discussion points as appropriate, *using proper APA citation methods*.
- **The initial post is due by Thursday 11:59 p.m. PST.**

Response Posts (2 posts, 3 points each)

- Respond to at least two different classmates
- Each response should be 75–100 words in length, or approximately one paragraph.
- Include course content, examples, personal and/or professional experiences in your responses.
- Critique your classmates' posts, but with respect. Demonstrate more depth and thought than simply stating "I agree" or "You are wrong." Remember, we are all in this learning process together.
- **Response posts are due by Sunday 11:59 p.m. PST.**

Individual Assignments (12* 20 points each)

- 12 assignments/projects/activities
- Must be uploaded to the file submission area
- Some assignments have rubrics
- Due by 11:59 p.m. PST Sunday of the assigned module

Final Reflection Paper (100 points)

Throughout this course you have engaged in a variety of discussions and assignments that are linked to epidemiology.

Review your assignments. Then, write a paper (approximately 3 pages, double-spaced) reflecting upon what you have learned throughout this course. You may use some, but not necessarily all, of the following prompts to guide you. Make sure you use proper epidemiological terminology, and demonstrate some of your learning!

- How did being in this course help you understand what is going on with the current COVID-19 pandemic?
- Which activities/discussions assisted you in deeper learning?
- Which activities/discussions were most helpful? Least helpful?
- What aspects of epidemiology would you still like to learn more about?
- How does understanding epidemiology at a basic level prepare you to be a better citizen?
- How does understanding epidemiology at a basic level prepare you for your future career? In what ways will understanding epidemiology prepare you for your future career?
- What advice would you offer future students taking this class?

Grading Scale

NOTE: Final grades will be rounded at the end of the semester, so an 89.6 would earn an A-, but an 89.4 would earn a B+.

Grade	%	Expectations/Evaluation Criteria
A	94-100	Student demonstrates mastery of the concepts; completes all assignments with a high degree of effort and skill; shows initiative and goes well beyond the minimum requirements; consistently participates and contributes.
A-	90-93	Student understands and integrates terms and concepts; completes all assignments with a moderate level of effort and skill and is an active participant.
B+	87-89	Student understands the core concepts; completes all assignments at an acceptable level and shows willingness to improve skills and usually participates.
B	83-86	Student understands the core concepts; completes the minimum work required and occasionally participates/contributes.
B-	80-82	Student understands most of the core concepts; completes the minimum work required and occasionally participates/contributes
C+	77-79	Student does not understand all of the core concepts; does not complete the minimum work required; does not participate/contribute often
C	73-76	
C-	70-72	
D	60-69	Student does not understand many of the core concepts; does not complete the minimum work required; does not participate/contribute
F	<60	Student has not performed at the level acceptable for this course

Additional Considerations:

Program Use of Student Work: Assignments completed for this course may be used as evidence of student learning in accreditation reports. Students who do not wish their work to be used for accreditation purposes must inform the course instructor in writing by the end of late registration. Your participation and cooperation are appreciated.

Missed Assignments/Late Work: Students are responsible for using time wisely to complete all module activities and assignments on time. Do not procrastinate. In general, **late work will not be accepted**. A grade of zero will be given for any student missing an assignment due date without a satisfactory excuse, as determined by the instructor. An example of a satisfactory excuse would be serious personal injury or illness to the student or a family member that can be documented, in which case the instructor may allow additional time to complete the assignment without penalty.

Additional UNLV Academic Policies

Public Health Directives

Face coverings are mandatory for all faculty and students in the classroom. Students must follow all active UNLV public health directives while enrolled in this class. UNLV public health directives are found at <https://www.unlv.edu/coronavirus/health-requirements>. Students who do not comply with these directives may be asked to leave the classroom. Refusal to follow the guidelines may result in further disciplinary action according to the UNLV Student Conduct Code, https://www.unlv.edu/sites/default/files/page_files/27/StudentConduct-Code.pdf, including being administratively withdrawn from the course.

Academic Misconduct

Academic integrity is a legitimate concern for every member of the University community. We all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility, and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy, and are encouraged to always take the ethical path whenever faced with choices. Students enrolling at UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's educational mission. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another person, from the Internet or any other source without proper citation of the source(s). See the Student Conduct Code, <https://www.unlv.edu/studentconduct/student-conduct>.

Auditing Classes

Auditing a course allows a student to continue attending the lectures and/or laboratories and discussion sessions associated with the course, but the student will not earn a grade for any component of the course. Students who audit a course receive the same educational experience as students taking the course for a grade, but will be excused from exams, assessments, and other evaluative measures that serve the primary purpose of assigning a grade.

Classroom Conduct

Students have a responsibility to conduct themselves in class and in the libraries in ways that do not interfere with the rights of other students to learn, or of instructors to teach. Use of devices such as pagers and cellular phones, or potentially disruptive activities are only permitted with the prior explicit consent of the instructor. Students are specifically prohibited to record classes without instructor authorization, including online/remote classes (either audio only, or video and audio). The instructor may rescind permission at any time during the class. If a student does not comply with established requirements or obstructs the functioning of the class, the instructor may initiate an administrative withdrawal of the student from the course.

Since the COVID-19 pandemic forced most instruction to be delivered remotely starting on March 2020, numerous students have asked instructors to record their synchronous classes, so that they can access them at their convenience. Instructors who agree to record their classes (audio only, or video and audio) should inform students in advance. Recorded lectures may not be broadly released to anyone, but made available exclusively to those students enrolled in the class during the particular academic term. Recorded lectures must be stored securely, and are subject to the Nevada System of Higher Education's Records Retention Policy, meaning that the recordings can only be deleted 120 days after the end of class (i.e., after grades are posted). Once this requirement is met, the recordings should be deleted. Class recordings are protected from disclosure, as they are deemed part of an educational record under the Family Educational Rights and Privacy Act (FERPA).

Copyright

The University requires all members of the University Community to familiarize themselves with, and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The University will neither protect nor defend you, nor assume any responsibility for employee or student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional copyright policy information is available at <https://www.unlv.edu/provost/copyright>.

Disability Resource Center (DRC)

The UNLV Disability Resource Center (SSC-A, Room 143, <https://www.unlv.edu/drc>, telephone 702-895-0866) provides resources for students with disabilities. Students who believe that they may need academic accommodations due to injury, disability, or due to pregnancy should contact the DRC as early as possible in the academic term. A Disabilities Specialist will discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours, so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

Final Examinations

The University requires that final exams given at the end of a course occur on the date and at the time specified in the Final Exam schedule. The Final Exam schedule is typically available at the start of the semester, and the classroom locations are available approximately one month before the end of the semester. See the Final Exam Schedule, <https://www.unlv.edu/registrar/calendars>.

Identity Verification in Online Courses

All UNLV students must use their Campus-issued ACE ID and password to log in to WebCampus-Canvas. UNLV students enrolled in online or hybrid courses are expected to read and adhere to the Student Academic Misconduct Policy, <https://www.unlv.edu/studentconduct/misconduct/policy>, which states that "acting or attempting to act as a substitute for another, or using or attempting to use a substitute, in any academic evaluation or assignment" is a form of academic misconduct. Intentionally sharing ACE login credentials with another person may be considered an attempt to use a substitute, and could result in investigation and sanctions, as outlined in the Student Academic Misconduct Policy.

UNLV students enrolled in online courses are also expected to read and adhere to the Acceptable Use of Computing and Information Technology Resources Policy, <https://www.it.unlv.edu/policies/acceptable-use-computing-and-information-technology-resources-policy>, which prohibits sharing university accounts with other persons without authorization.

To the greatest extent possible, all graded assignments and assessments in UNLV online courses should be hosted in WebCampus-Canvas or another UNLV-managed platform that requires ACE login credentials for access.

Incomplete Grades

The grade of "I" (Incomplete) may be granted when a student has satisfactorily completed three-fourths of course work for that semester/session, but cannot complete the last part of the course for reason(s) beyond the student's control and acceptable to the instructor, and the instructor believes that the student can finish the course without repeating it. For undergraduate courses, the incomplete work must be made up before the end of the following regular semester. Graduate students receiving "I" grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the period indicated, a grade of "F" will be recorded, and the student's GPA will be adjusted accordingly. Students who are fulfilling an Incomplete grade do not register for the course, but make individual arrangements with the instructor who assigned the "I" grade.

Library Resources

Librarians are available to consult with students on research needs, including developing research topics, finding information, and evaluating sources. To make an appointment with a subject expert for this class, please visit the Libraries' Research Consultation website, <https://guides.library.unlv.edu/appointments/librarian>. You can also ask the library staff questions via chat and text message at <https://ask.library.unlv.edu/>.

Missed Classwork

Any student missing class, quizzes, examinations, or any other class or laboratory work because of observance of religious holidays will be given an opportunity during that semester to make up the missed work. The make-up opportunity will apply to the religious holiday absence only. It is the responsibility of the student to notify the instructor within the first 14 calendar days of the course for Fall and Spring courses (except for modular courses), or within the first 7 calendar days of the course for Summer and modular courses, of their intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit the Missed Classwork policy, under Registration Policies, on the Academic Policies webpage, <https://catalog.unlv.edu/content.php?catoid=29&navoid=7326>.

In accordance with the policy approved by the Faculty Senate regarding missed class time and assignments, students who represent UNLV in any official extracurricular activity will also have the opportunity to make up assignments, provided that the student provides official written notification to the instructor no less than one week prior to the missed class(es).

The spirit and intent of the policy for missed classwork is to offer fair and equitable assessment opportunities to all students, including those representing the University in extracurricular activities.

Instructors should consider, for example, that in courses which offer a "Drop one" option for the lowest assignment, quiz, or exam, assigning the student a grade of zero for an excused absence for

extracurricular activity is both contrary to the intent of the Faculty Senate's policy, and an infringement on the student's right to complete all work for the course.

This policy will not apply in the event that completing the assignment or administering the examination at an alternate time would impose an undue hardship on the instructor or the University that could be reasonably avoided. There should be a good faith effort by both the instructor and the student to agree to a reasonable resolution. When disagreements regarding this policy arise, decisions can be appealed to the Department Chair/School Director, College/School Dean, and/or the Faculty Senate Academic Standards Committee.

For purposes of definition, extracurricular activities may include, but are not limited to: academic recruitment activities, competitive intercollegiate athletics, fine arts activities, liberal arts competitions, science and engineering competitions, and any other event or activity sanctioned by a College/School Dean, and/or by the Executive Vice President and Provost.

Rebelmail

Rebelmail is UNLV's official email system for students and by University policy, instructors and staff should only send emails to students' Rebelmail accounts. Rebelmail is one of the primary ways in which students receive official University communications, information about deadlines, major Campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the University. Emailing within WebCampus-Canvas is also acceptable.

Tutoring and Coaching

The Academic Success Center (ASC) provides tutoring, academic success coaching, and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, please visit the ASC website, <https://www.unlv.edu/asc>, or call 702-895-3177. The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of SSC A, Room 254. Drop-in tutoring is located on the second floor of the Lied Library, and on the second floor of the College of Engineering building (TBE A 207).

UNLV Writing Center

One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, <https://writingcenter.unlv.edu/>, located in the Central Desert Complex, Building 3, Room 301 (CDC 3-301). Walk-in consultations are sometimes available, but students with appointments receive priority assistance. Students may make appointments in person or by calling the Center, telephone 702-895-3908. Students are requested to bring to their appointments their Rebel ID Card, a copy of the instructions for their assignment, and two copies of any writing they have completed on their assignment.

Diversity Statement

As an institution of higher learning, UNLV represents a rich diversity of human beings among its faculty, staff, and students, and is committed to aspiring to maintain a Campus environment that values that diversity. Accordingly, the University supports understanding and appreciation of all members of its community, regardless of race, sex, age, color, national origin, ethnicity, creed, religion, disability, sexual orientation, gender, gender identity, marital status, pregnancy, genetic information, veteran status, or

political affiliation. Please see University Statements and Compliance, <https://www.unlv.edu/about/statements-compliance>.

A successful learning experience requires mutual respect and trust between the students and the instructor. Accordingly, the instructor asks that students be willing to listen to one another's points of view, acknowledging that there may be disagreements, keep discussion and comments on topic, and use first person, positive language when expressing their perspectives.

Schedule of Due Dates

Module	Weeks	Textbook Chapters	Assignments	Due Dates
Module 1	Weeks 1 & 2	Chapter 1: Foundations of Epidemiology Chapter 2: Historic Developments in Epidemiology	Introductions Discussion Syllabus Quiz Mentor Survey Assignment #1 Discussion #1 Assignment #2 Quiz #1	Thurs., Jan. 21 Sun., Jan. 24 Sun., Jan. 24 Sun., Jan. 24 Thurs., Jan. 28* Sun., Jan. 31 Sun., Jan. 31
	Weeks 3 & 4	Chapter 3: Practical Disease Concepts in Epidemiology Chapter 4: Design Strategies and Statistical Methods in Descriptive Epidemiology	Assignment #3 Discussion #2 Assignment #4 Quiz #2	Sun., Feb. 7 Thurs., Feb. 11* Sun., Feb. 14 Sun., Feb. 14
Module 3	Weeks 5 & 6	Chapter 5: Descriptive Epidemiology According to Person, Place, and Time	Assignment #5 Discussion #3 Assignment #6 Quiz #3	Sun., Feb. 21 Thurs., Feb. 25* Sun., Feb. 28 Sun., Feb. 28
Module 4	Weeks 7 & 8	Chapter 6: General Health and Population Indicators Chapter 7: Design Strategies and Statistical Methods in Analytic Epidemiology	Discussion #4 Discussion #5 Assignment #7 Quiz #4	Thurs., March 4* Thurs., March 11* Sun., March 14 Sun., March 14
	SPRING BREAK March 15-21			
Module 5	Weeks 9 & 10	Chapter 8: Experimental Studies in Epidemiology Chapter 9: Causality	Assignment #8 Discussion #6 Assignment #9 Quiz #5	Sun., March 28 Thurs., April 1* Sun., April 4 Sun., April 4
Module 6	Weeks 11 & 12	Chapter 10: Field Epidemiology	Discussion #7 Discussion #8 Assignment #10 Quiz #6	Thurs., April 8* Thurs., April 15* Sun., April 18 Sun., April 18
Module 7	Weeks 13 & 14	Chapter 11: Chronic Disease Epidemiology	Discussion #9 Assignment #11 Quiz #7	Thurs., April 22* Sun., May 2 Sun., May 2
Module 8	Weeks 15 & 16	Chapter 12: Clinical Epidemiology	Discussion #10 Assignment #12 Quiz #8 Final Paper	Thurs., May 6* Sun., May 9 Fri., May 14 Fri., May 14
* For discussions, initial post is due on Thursday, 11:59pm; Response Posts due on Sundays, 11:59pm				