



Undergraduate Course Syllabus

HCM 330 Principles of Epidemiology

Center: Online

Credits: 3

Course Prerequisites

Acceptance into the Undergraduate Program

Course Description

This course presents the basic principles of epidemiology with particular emphasis on applications in healthcare management. Topics include specific tools of epidemiology used for purposes of planning, monitoring, and evaluating population health. These include identification of disease, measures of incidence and prevalence, study designs, confidence intervals, p-values, statistical interaction, causal inference, and survival analysis. Methods for managing the health of populations using an understanding of the factors that influence population health are discussed. Strategies that health care organizations and systems can use to control these factors are also considered.

Course Outcomes

- Explain the term “determinates of health” and its significance to healthcare organizations
- Explain the population perspective, access key sources of demographic and public health data, and describe the magnitude, population distribution, and time trends of public health problems in the US and internationally
- Discuss, apply, and interpret basic epidemiologic concepts and measures of disease occurrence in populations: incidence, prevalence, relative risk, attributable risk, standardization.
- Use basic methods for investigating an outbreak of a health problem in a community, making use of the concepts of disease variation in time, person, and place.
- Explain the relative strengths and limitations of epidemiological strategies, (e.g., cohort, case-control, cross-sectional, ecological and intervention studies) for studying associations between risk factors or exposures in populations and rates of disease occurrence or death.
- Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use, and dissemination of epidemiologic data in different cultures.

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, [MBS Direct](#), rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC. ISBN: 9781433805615

Friis, R. H. (2010). *Epidemiology 101* (1st ed.). American Public Health: Jones and Bartlett Publishers. ISBN: 9780763754433.

Instructor Availability and Response Time

Your class interaction with your instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be active in Blackboard at least five days a week, and you will normally communicate with your instructor in the open Blackboard discussion forum so that your questions and the instructor's answers benefit the entire class. You should send emails directly to your instructor only when you need to discuss something of a personal or sensitive nature, and in those cases your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussion Post	4	4	16
Weekly Reflection Journal	8	2	16
Case Studies	3	10	30
Case Study Group Presentation	1	15	15
Term Paper	1	10	10
Final Exam	1	13	13
		Total Course Points:	100 Points

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Undergraduate

Total Points: 100				
<u>Grade</u>	<u>Numerical Equivalent</u>	<u>Points</u>	<u>Points Equivalent</u>	
			<i>Lower</i>	<i>Upper</i>
A	93-100	4	93	100
A-	90-92	3.67	90	92
B+	87-89	3.33	87	89
B	83-86	3	83	86
B-	80-82	2.67	80	82
C+	77-79	2.33	77	79
C	73-76	2	73	76
C-	70-72	1.67	70	72
D+	67-69	1.33	67	69
D	60-66	1	60	66
F	0-59	0	0	59
I	Incomplete			
IF	Incomplete/Failure*			
IP	In Progress (past end of term)			
W	Withdrawn			

*Incomplete and Incomplete/Failure: Any student requesting an "I" grade must complete a Student Petition and Contract for a Grade of Incomplete and submit it to the proper offices prior to the final day of the term/semester. The petition will specify a deadline by which the coursework must be completed. The incomplete automatically becomes an "IF" if work has not been completed and a grade has not been submitted by the specific deadline.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. All assignments are due by 11:59 p.m. Eastern Time on the last day of the module week.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Module One: Introduction <i>Epidemiology 101</i> : Chapters 1 and 2 1-1 Reflection: Your Experience with Epidemiology 1-2 Discussion: Public Health Achievements
2	Module Two: Determinants of Health <i>Epidemiology 101</i> : Chapter 4 2-1 Reflection: Part 1 Real World Descriptive Epi 2-2 Case Study: Descriptive Epidemiology and West Nile Virus 2-3 Reflection: Part 2 Real World Descriptive Epi
3	Module Three: Epidemiologic Data and its Sources <i>Epidemiology 101</i> : Chapter 3 3-1 Reflection: Part 1 Creating Policies in Screening 3-2 Discussion: Screen Controversies 3-3 Quiz 1 3-4 Paper: MMWR Summary 3-5 Reflection: Part 2 Creating Policies in Screening
4	Module Four: Measures of Comparison <i>Epidemiology 101</i> : Chapter 5 4-1 Reflection: Part 1 Importance of Standardization 4-2 Case Study: Standardization Case Study 4-3 Reflection: Part 2 Importance of Standardization
5	Module Five: Study Designs <i>Epidemiology 101</i> : Chapter 6 5-1 Reflection: Part 1 The Placebo Effect 5-2 Discussion: Practicality and Study Design 5-3 Reflection: Part 2 The Placebo Effect
6	Module Six: Study Design (II) <i>Epidemiology 101</i> : Chapter 6 6-1 Reflection: Part 1 Your Definition of Validity 6-2 Group Presentation Case Study 6-3 Quiz 2 6-4 Paper: MMWR Summary 6-5 Reflection: Part 2 Your Definition of Validity

7	Module Seven: Outbreak Investigation <i>Epidemiology 101</i> : Chapter 8 7-1 Reflection: Part 1 Outbreaks in Our Time 7-2 Discussion: Outbreaks in the Healthcare System 7-3 Case Study: Outbreak Investigation 7-4 Case Study Group Presentation: Hypotheses Testing 7-5 Reflection: Part 2 Outbreaks in Our Time
8	Module Eight: Real World Epidemiology <i>Epidemiology 101</i> : Chapters 7 and 10 8-1 Reflection: Part 1 Policies in Epidemiology 8-2 Final Exam 8-3 Reflection: Part 2 Policies in Epidemiology

Attendance Policy

Online students are required to post to the Blackboard discussion board during the first week of class. If a student does not submit a posting to the discussion board during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the [full attendance policy](#).

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the [full late assignment policy](#).

SNHU College of Online and Continuing Education Guide to Student Success

Review the [guide to student success](#).

Diversity and Disability Statement

The College of Online and Continuing Education (COCE) at SNHU values diversity and inclusion. SNHU strives to create inclusive and welcoming academic environments. If there are aspects of the instruction or design of this course that present barriers to your inclusion, please notify the Disability Resource Center (DRC) as soon as possible. We will work with you and your instructor to address needs and concerns.

We encourage all students with known or suspected physical, medical, sensory, psychiatric, and/or learning disabilities to register with the Disability Resource Center (DRC) in order to assess learning needs and take advantage of available academic accommodations and support services. We look forward to hearing from you. Our contact information is below.

Disability Resource Center (DRC)
(877) 591-4723 (select option 4)
(877) 520-8916 (fax)
drc@snhu.edu

We welcome COCE students, faculty, and staff to consult with the Disability Resource Center (DRC) on disability-related questions or concerns.

Academic Honesty Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the [full academic honesty policy](#).

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the [full copyright policy](#).

SNHU College of Online and Continuing Education Withdrawal Policy

Review the [full withdrawal policy](#).

Southern New Hampshire University Policies

More information about SNHU policies can be found on the [policy page](#).