

**College of Micronesia-FSM
Course Outline**

GENERAL INFORMATION:

Course Code and Title: PH 212 Surveillance, Identification, & Management of Disease Outbreak		
Course owner by program: Health Sciences/ASDPH		
Campus: Kosrae, National	Initiator: Frehiwot Teshome	Date: August 2025
Course description: This course provides an in-depth understanding of public health surveillance systems, outbreak detection, and response strategies. Students will examine how diseases are tracked, how data inform public health action, and how outbreaks are investigated and managed at local, national, and global levels. Emphasis is placed on epidemiological tools, Surveillance data use, field investigation protocols, risk communication, and coordination among public health agencies.		

COURSE HOURS/CREDITS:

	Hours per Week		No. of Weeks	=	Total Hours	=	Semester Credits
Lecture	3	x	16	=	48 /16	=	3
Laboratory		x		=		=	
Workshop		x		=		=	
Co-op		x		=		=	
			Total Semester		Credits		3

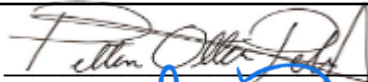
PURPOSE OF COURSE:

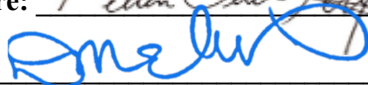
- Degree requirement
- Degree elective
- Certificate
- Other

PREREQUISITES: PH 101, PH 111

PSLOs OF OTHER PROGRAMS THIS COURSE MEETS:

PSLO#	Program

CC Chair signature:  Date recommended: 02/10/2026

VPIA signature:  Date approved: 2/20/2026

I. INSTITUTIONAL STUDENT LEARNING OUTCOMES

[X]	1. Effective oral communication: capacity to deliver prepared, purposeful presentations designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.
[]	2. Effective written communication: development and expression of ideas in writing through work in many genres and styles, utilizing different writing technologies, and mixing texts, data, and images through iterative experiences across the curriculum.
[X]	3. Critical thinking: a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.
[X]	4. Problem solving: capacity to design, evaluate, and implement a strategy to answer an open-ended question or achieve a desired goal.
[]	5. Intercultural knowledge and competence: a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts.
[]	6. Information literacy: the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand.
[]	7. Foundations and skills for life-long learning: purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills, and competence.
[X]	8. Quantitative Reasoning: ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations; comprehends and can create sophisticated arguments supported by quantitative evidence and can clearly communicate those arguments in a variety of formats.

2) PROGRAM STUDENT LEARNING OUTCOMES (PSLOs): The student will be able to:

1. Deliver effective public health presentations
2. Develop well-researched written public health reports
3. Analyze public health data using critical thinking
4. Design and evaluate community health solutions
5. Apply cultural competence in public health interventions
6. Utilize credible sources and research for public health decision-making
7. Engage in professional development for lifelong learning
8. Apply quantitative reasoning to epidemiological and statistical data

3) COURSE STUDENT LEARNING OUTCOMES (CSLOs) (General): The student will be able to:

1. Explain the principles and types of public health surveillance systems.
2. Apply outbreak investigation steps using epidemiologic methods.
3. Develop a response plan for managing infectious disease outbreaks, including communication and control measures.

4) COURSE STUDENT LEARNING OUTCOMES (CSLOs) (Specific): The student will be able to:

1. CSLO (General) 1: Explain the principles and types of public health surveillance systems.			
Student Learning Outcome (specific)	ISLO	PSLO	Assessment Strategies
1.1 Describe passive, active, sentinel, and syndromic surveillance.	8	8	Exam describing the different types of surveillance.
1.2 Interpret surveillance reports and data flows.			Summary assignment on the interpretation of surveillance reports to be graded with rubrics.

CSLO (General) 2: Apply outbreak investigation steps using epidemiologic methods.			
Student Learning Outcome (specific)	ISLO	PSLO	Assessment Strategies
2.1 Apply steps of an outbreak investigation.	3*	3	Outbreak case study analysis report assignment to be graded with rubrics.
2.2 Construct epidemic curves, and case definitions.			Quiz on the concepts of epidemic curves and case definitions.
CSLO (General) 3: Develop a response plan for managing infectious disease outbreaks, including communication and control measures.			
Student Learning Outcome (specific)	ISLO	PSLO	Assessment Strategies
3.1 Create risk communication strategies.	1, 4	1,4	Written assignment on risk communication strategies of a selected communicable disease.
3.2 Draft a basic outbreak response plan (including control and prevention).			Outbreak response presentation to be graded with a rubric.

5) COURSE CONTENT:

1. Introduction to Disease Surveillance systems
2. Types of Surveillance systems
3. Surveillance in practice
4. Introduction to Outbreak Investigations
5. Epidemiological Tools in Outbreak Investigations
6. Communicating Risk During Outbreaks
7. Public Health Response Teams
8. Infection control and Community interventions
9. Technology in Outbreak Surveillance
10. Legal and Ethical considerations
11. Global Disease Outbreak Response

6) METHOD(S) OF INSTRUCTION:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Lecture | <input checked="" type="checkbox"/> Cooperative learning groups |
| <input type="checkbox"/> Laboratory | <input checked="" type="checkbox"/> In-class exercises |
| <input type="checkbox"/> Audio visual | <input checked="" type="checkbox"/> Demonstrations |
| <input checked="" type="checkbox"/> Other: online | |

7) Suggested Resources AND COURSE MATERIALS:

"Principles of Epidemiology in Public Health Practice" (CDC Free Textbook):
<https://www.cdc.gov/csels/dsepd/ss1978/>

8) REFERENCE MATERIALS:

WHO: Outbreak Toolkit and Training Modules: <https://www.who.int/emergencies/surveillance>

9) INSTRUCTIONAL COSTS: None

10) EVALUATION: Student must have a grade of 70%[C] or better on the outbreak response presentation graded with a rubric to pass this course.

11) CREDIT BY EXAMINATION: None