

**College of Micronesia-FSM
Course Outline**

GENERAL INFORMATION:

Course Code and Title: PH 211 Health Research Methodology		
Course owner by program: Health Sciences/ASDPH		
Campus: Kosrae, National	Initiator: Frehiwot Teshome	Date: August 2025
Course description: This course provides students with a foundation in health research methods, including the design, implementation, analysis, and interpretation of public health studies. Students will explore quantitative, qualitative, and mixed-methods research approaches, understand ethical research practices, and apply statistical reasoning to public health problems. Emphasis is placed on how to formulate basic research questions, select appropriate study designs, data collection techniques, and critical evaluation of scientific literature.		

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:

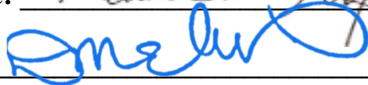
- Degree requirement
- Degree elective
- Certificate
- Other

PREREQUISITES: EN 110, EN 120a, & 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.
[]	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.
[]	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.
[X]	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.
[X]	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. Utilize Public Health research questions and select appropriate study methodologies.
2. Apply ethical principles and critical appraisal skills in the evaluation of health research.
3. Analyze and interpret quantitative and qualitative research data to inform public health practice.

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

1. CSLO (General) 1: Utilize Public Health research questions and select appropriate study methodologies.			
Student Learning Outcome (specific)	ISLO	PSLO	Assessment Strategies
1.1 Distinguish between observational and experimental study designs.	1, 6	1,6	Students will have a written assignment explaining the different study designs to be graded with a rubric

1.2 Construct research questions. 1.3 Design a simple quantitative or qualitative research study.			Students will submit a research proposal question including methodology, ethical considerations, and proposed analysis to be graded with rubrics. Students will engage in discussion forums or in-class activities about research design to be graded with a rubric.
CSLO (General) 2: Apply ethical principles and critical appraisal skills in the evaluation of health research.			
Student Learning Outcome (specific)	ISLO	PSLO	Assessment Strategies
2.1 Identify key ethical principles (e.g., autonomy, beneficence, justice) in research. 2.2 Evaluate research articles for bias, validity, and reliability. 2.3 Summarize the role of institutional review boards in protecting human subjects.	7	7	Ethics case study problems in exam to be graded with a rubric. Case presentation assignment to be graded with rubrics. Assignment on evaluating a peer-reviewed public health article focusing on ethical considerations and methodological quality using a checklist.
CSLO (General) 3: Analyze and interpret quantitative and qualitative research data to inform public health practice.			
Student Learning Outcome (specific)	ISLO	PSLO	Assessment Strategies
3.1 Perform basic descriptive statistical analysis. 3.2 Interpret results from common public health research articles.	8*	8	Exam on basic statistical analysis exercises to be graded with an answer key checklist. Assignment on interpretation of descriptive statistics using public health data sets to be graded with rubrics.

5) COURSE CONTENT:

1. Introduction to Public Health Research
2. Framing Research Questions
3. Research Designs
4. Literature Review & Sources
5. Research Ethics and IRB
6. Sampling and Data collection
7. Introduction to descriptive statistics
8. Qualitative Research methods
9. Analyzing Research Literature
10. Writing Research Proposal

11. Presenting Research Findings

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 type="checkbox"/> Demonstrations |
| <input checked="" type="checkbox"/> Other: online | |

7) Suggested Textbook AND COURSE MATERIALS:

Fathalla, Mohamoud (2004). Practical Guide for Health Researchers; WHO Regional Publications, Eastern Mediterranean Series 30.

<https://www.who.int/publications/i/item/a-practical-guide-for-health-researchers>

8) REFERENCE MATERIALS:

Equator Network – Enhancing the Quality and Transparency of Research:

<https://www.equator-network.org/>

9) INSTRUCTIONAL COSTS: None

10) EVALUATION: Students must have a grade of 70%[C] or better to pass this course. To be graded based on the research proposal submitted.

11) CREDIT BY EXAMINATION: None