2021-22 Program Assessment Report

B.S. Population Health Management

Submission Deadline: October 31, 2022

to Office of Academic Excellence

Section 1 - Program Mission and Educational Objectives

- Program Mission: Population Health Management is an ideal program for Oregon Tech as an "innovative and rigorous applied degree program" that is focused on "application of theory to practice." While other public health and health sciences programs educate students about community health, Oregon Tech's PHM program transmits transferable, hands-on skills, applied to both healthcare delivery and community based prevention. Significant legislative changes to healthcare in the U.S. have produced an increasing demand for population health management in order to reduce healthcare costs and improve the efficiency and efficacy of health services. Qualified professionals are needed immediately to fill positions in patient advocacy, health and wellness coaching, research and data analysis, community health education, and federally funded disease prevention programs.
- Mission Alignment: H The healthcare industry must recruit well-trained professionals with both a social science background and concrete knowledge of health and healthcare.
 Oregon Tech students enjoy a hands-on learning environment, at an institution committed to job placement and industry needs, with the ability to integrate multiple departments for an interdisciplinary approach.

Section 2 – Program Student Learning Outcomes

- PSLOs: The following objectives are designed to outline the expectations faculty have of students as well as ensure the necessary skills needed for a wide range of career options for PHM majors. These outcomes stem from the program's mission of applied social science education based on theoretical and action-based learning opportunities. Many of the "hands on" components of the learning objectives are design for immediately use in prospective employment positions, whereas many of the theoretical social sciences learning outcomes are geared toward graduate's ability to navigate the employment landscape (new challenges, novel ideas, critical thinking, and political maneuvering) and seek new opportunities, promotion, and engage in effective leadership. Graduates of the BPHM program at Oregon Tech should be able to do the following:
- Work in a wide range of positions related to assessing, improving, or evaluating systems related to population health.

- Pursue advanced degrees or training in areas of Population Health, Public Health, Sociology, Social Work Medical School, Nursing School, or Health Science-related fields.
- Communicate effectively in the field of health and health care as well as everyday life.
- Critically and ethically assess the role of organizations and systems that influence population health.

Section 3 – Curriculum Map

• <u>Curriculum Map:</u> How are each of your program student learning outcomes (and institutional ISLO's) supported and scaffolded throughout the program's curriculum?

		1						1				
COURSE	PSLO	PSLO	PSLO	PSLO	PSLO	PSLO	ESLO	ESLO	ESLO	ESLO	ESLO	ESLO
				4	5	6						
	1	2	3				1 -	2 - I/A	3 - ER	4 - QL	5 -	6 - DP
							Com				TW	
SOC 204	F							F				F
30020.	·											· ·
SOC 225	F	F						F				F
300 223	'	'						'				'
SOC 205						F						
300 203						'						
soc				Р				Р	F	Р		
300				P				P	Г	P		
301/302												
00-,00-												
SOC 335			Р		F							
PHM						С						С
425												
435												

Section 4 – Assessment Cycle

Table 1. Three-Year Cycle for Assessment of Student Learning Outcomes

	Program Learning Outcome	'18- 19	'19- '20	'20- 21	'21- 22	'22- 23	'23- 24
1	Students explain basic theoretical frameworks of sociology and demonstrate an ability to apply social theory to behavioral trends.		х				
2	Students will demonstrate understanding of the impact of such factors as culture, ethnicity, nationality, age, gender, sexual orientation, mental and physical characteristics, family values, education, religious and spiritual values, and socio-economics status on the health and wellbeing of individuals	х			х		
3	Students will synthesis ideas related to cultural competency and demonstrate skills related to cultural competency.			х			Х
4	Students will demonstrate an understanding of the sociological research methods, including an ability to organize, analyze, and present data.	х				х	
5	Students will demonstrate an understanding of the roles, functions, and responsibilities of healthcare professionals and patients, including alternative approaches to healthcare.			х			х
6	Students will explain theories and methods of health behavior change and demonstrate the skills needed to assess programs, interventions, and activities aimed at changing health-related behavior.		х			х	

Section 5 – Assessment Data Collection Processes

- <u>Performance Target</u>: 75% of students meeting each criteria.
- Activity: Grading of Final Project for SOC 225 in all sections

- Sample: Approximately 180 students were assessed
- Reliability: We used two very similar assignments, one used in the online sections (3), and one used in the residential sections (3)
- Rubric: We used rubrics (included in the Appendix)

Section 6 - Assessment Data

We conducted formal assessment of Outcome #2 during 2021-2022.

Student Learning Outcome #2:

Students will demonstrate understanding of the impact of such factors as culture, ethnicity, nationality, age, gender, sexual orientation, mental and physical characteristics, family values, education, religious and spiritual values, and socio-economics status on the health and wellbeing of individuals

<u>Direct Assessment #1</u>

We assessed this outcome in SOC 225, Medical Sociology, in Fall 2021, Winter 2022, and Spring 2022 terms using rubric-scored final projects. The faculty rated the proficiency of students using the performance criteria described in Table 2 below.

Table 2. Direct Assessment #1 SOC 225 Medical Sociology

Online sections of SOC 225

Performance Criteria	Assessment	Minimum	Results
	Method	Acceptable Performance	
Health Issue			
	Medical Sociology Final Project, Rubric	75%	100%
Population Perspective			
	Medical Sociology Final Project, Rubric	75%	92%
Project/Program/Initiative		75%	84%

	Medical Sociology Final Project, Rubric		
Social Factor	Medical Sociology Final Project, Rubric	75%	92%
Reference/grammar/spelling	Medical Sociology Final Project, Rubric	75%	92%

In-person sections of SOC 225

Performance Criteria	Assessment Method	Minimum Acceptable Performance	Results
Identifies minimum of two social factors related to the health issue	Assignment #1, rubric	75% or more	100%
Uses sociological theory to explain the relationship between social factors and observed health issue.	Assignment #1, rubric	75% or more	87%
Supports arguments related to the current trends in health issue with peer-reviewed sources.	Assignment #1, rubric	75% or more	95%
Demonstrates how the health issue could be addressed through intervention.	Assignment #2, rubric	75% or more	100%
Explains how the intervention specifically accounts for social factors.	Assignment #2, rubric	75% or more	92%

Compared to assessment from the 2018-2019 of the same PSLO, slight improvement were made in the results of in-person sections performance on using social theory to explain why social factors are related to health outcomes and how interventions that improve health should specifically account for social factors including race, gender, social class, age, etc.

Evidence of Improvement in Student Learning

Subjectively as we look at student performance over the course of the term, we see progress in students' understanding of the concept of social factors. This is a big shift from the more common individual perspective with regards to health, especially for students taking courses to prepare them for the health professions. In the assessment of the final project, most students by that time have learned to articulate social factors and understand a population (vs. individual) perspective.

The area where we see the least evidence of learning (for a minority of students), is the aspect of linking the concept of inequalities by social determinants, with a program or initiative to address the inequity. This may have to do with when students take Program Planning and Evaluation. This warrants a more close consideration of where to put that course. Since that course is more upper division, it wouldn't make sense to have students take it before taking this intro course Medical Sociology. But as we work to align all sections and all instructors' Medical Sociology courses, an analysis of the final project would be helpful.

Section 7 – Data-driven Action Plans:

In light of reviewing this academic year's PSLO (#2), this is further motivation to analyze the assignments in Medical Sociology, and to consider what PSLOs could also be evaluated in Program Planning and Evaluation. It could be that it is too early to assess PSLO #2, and that it could be assessed in upper division courses, provided those courses have content that reviews the concept of social determinants sufficiently.

Our program has a relatively new course, PHM 105 Introduction to Population Health Management, that we would like to review as a potential course to assess various PSLOs. Since this course was designed to introduce students to the field of population health management, it blends concepts from multiple fields such as health informatics, healthcare administration, public health, and marketing.

Given that this course also has a final project similar to SOC 225 Medical Sociology, this course could be another avenue to assess students' comprehension of social determinants as they apply to practices and careers in industry.

Another development was the alignment of SOC 335 Health Inequality and Cultural Competency across instructors and across modalities.

What are the top 3 continuous improvements your program has made in the last 3 years, and what evidence/data did you use to make those changes? (For example: hired faculty, purchased more equipment, curriculum changes, etc.)

The top 3 continuous improvements made to the PHM program are:

- 1) Online Courses and Quality: we have continued to develop more online courses so that our program can ultimately be offered fully online. We are up to about 90% of our courses available in online format. Additionally faculty have overhauled six courses to be more user friendly and include more faculty presence through videos and podcasts. We used student evaluation data that indicated some of our online courses needed to be improved, and we used data in the form of student requests for the Medical Sociology minor to be online to begin the process of online offerings. We also used enrollment data to determine that online may be a Plan B due to difficulty in recruiting to Klamath Falls.
- 2) Building Industry Partnerships in Portland: We relocated one faculty member to the Portland Metro area to begin making industry connections in that area and offer programs there. This led to the design of the Population Health Innovation Certificate with industry collaboration, which takes the PHM-BS curriculum and levels it up to the graduate level to better serve health professionals and get the OT-PHM name out. This was based on data that indicated more PHM job opportunities in the Portland Metro area, and this expands our reach from Klamath County, which we had exclusively focused on for the first 7 years of the program.
- 3) Curriculum Alignment with Industry: based on job market research, conducted by faculty and students at the Population Health Management Research Center (PHMRC), we included courses in Geographic Information Systems, and more courses in Health Informatics, as well as a new course, Intro to Population Health Management, to better align our medical sociology/population health curriculum to match the job market skills and industry needs.

Provide 3 examples of student achievement in your program over the last 3 years. (For example: graduation, persistence, retention, DFWI rates, presentations, participation in student competitions, etc.)

- 1) Student Job Placement: we have 100% job placement
- 2) **Student Career Trajectories:** based on our first PHM cohort graduating in 2016, all students have had a career trajectory that has included at least one significant promotion, many at the director level now, and/or have pursued graduate work in competitive programs
- 3) Student Research Projects Benefitting Local Organizations: about 80% of our students have conducted projects at the PHMRC or with individual agencies, that have directly benefitted local organizations, because the projects are identified and requested by community organizations.

Provide 3 examples of student success stories for your program over the last 3 years. (For example: job placement, published papers, paper or poster presentations, participation in student competitions, industry impact, etc.)

- Cord VanRiper, in the first PHM graduating cohort, decides to stay in the local area and be a leader in advancing the new field and practice of population health management. He decides to forgo medical school for a time, and gets his start at Cascade Health Alliance, now at Klamath Health Partnership as the Director of Quality. As a student he was part of multiple research projects on community health, then worked alongside PHM faculty and students at the research center, only as a professional and leader, on the Community Health Assessment.
- Cally McCool, switches to PHM in the last year of her imaging program right before she was to go on externship. She was inspired by her PHM and sociology classes, and embarked on a career in public health serving her local community (being from Klamath Falls). Making several upward transitions, she is now the Operations Manager at Cascade Health Alliance. She continually picked up new PHM skills, including using her health informatics classes to become a Health Analyst, and her public health courses to translate into her time at Public Health. She represents the versatility of the PHM program and its students!
- Jordan Ackernecht, undergoes a heart transplant during her time as a student. She is part of the development of the PHM student club, and with the support of her fellow PHM students and faculty, makes it through to graduate, to then quickly go on to having her dream job as a Patient Coordinator and Navigator, and was accepted to Berkely's Public Health Masters Program.

Describe your efforts so far in closing equity gaps in your program? How have you assessed or identified equity gaps? What actions have you taken to help students achieve their potential (For example: project-based experiences, inclusivity exercises, TILT assignment instructions, etc.)?

As sociology professors, equity is a constant topic in our courses and one we discuss at length with our students, which is a benefit as there are opportunities to direct students to services and on-campus resources when available. We have various activities embedded into our program, such as the Implicit Bias Test, and whole courses, such as Health Inequality and Cultural Competency.

This year we discovered a gender equity gap, that we are in the beginning stages of discussing how to remedy. Additionally our faculty have served on the Diversity, Equity, and Inclusion

committee. Several sections of courses taught in our program experience higher than average DFWI rates including SOC 201, SOC 225, and SOC 335. These courses have not historically had such high DFWI rates, and this year, we will monitor such rates to determine if this is a trend or an anomaly.

Section 8 – Closing the Loop: Reflection on previous work

For the future we plan to continue to design our courses so they are available asynchronously as well as synchronous remote and residential. Being able to design these courses so they are consistent for assessment is a continued goal.

Reflecting on actions to close the loop from 2020-2021 include:

- 1) Assess the student's ability to demonstrate cultural competence via new assignment,
 - a. A new assignment to assess cultural competence in SOC 335 was not completed during this year. We plan to design a new assignment in Fall 2022 and deploy in Spring 2023.
- 2) Better assess #6 separate from cultural competence,
 - a. Instructors have been placing more emphasis in classroom activities related to PSLO#6 in different courses including SOC 205.
- 3) Ensure consistency in material taught as same courses but different instructors,
 - a. Plans to develop a shared assignment for SOC 335 will work toward this goal.
 - b. We plan to integrate similar readings outside the textbook in the coming year.
- 4) Integrate more applied projects that incorporate various disciplines,
 - a. This improvement was not addressed in 2021-2022.
- 5) Align programmatic assessment cycle with University assessment cycle.
 - a. This was completed.

Program Assessment Report Feedback

2021-22 Assessment Report

Program:

Department Chair:

Program Assessment Report Author:

Rubric Measure Well Developed,
Progressing or Not
included.

Program mission is aligned to University Mission	
Educational Objectives Wording is Actionable	
PSLO's are justified by Professional Standards	
PSLO'S are aligned to ISLO	
Curriculum Map: Scaffolding indicates Foundational, Practice, and Capstone Assessments by course	
Assessment Cycle is three years to cover all PSLO and ISLO	
Actions taken by programs on assessment during each year of the cycle are specified	
During collection year, courses/assignments are specified that align to PSLO at FP&C levels	
Rubric: Criteria for grading the assignment is described (appendix)	
Sample: Number of samples reviewed is specified	
Reliability: Reviewer and locations of the assignment are specified	
Performance Targets of acceptability are indicated	
Results include: Graduation, Retention, Persistence, DFWI, Post Grad Success, Equity Gaps, PSLO, ISLO	
Interpretation: Current results are compared against performance targets	
Interpretation: Current results are compared against previous 3 years of data	
Interpretation: Current results are compared against University data	
Action drivers: Items not meeting performance targets have actions planned	
Action drivers: Additional action plans for overall department improvement are indicated	
Action plans: Specifics of accountability and timelines are indicated	
Action plans: Actions are linked to budgetary decisions	
Faculty discuss trends in the data	
Faculty discuss previous action plan success given new data	
Faculty discuss the assessment process and make any improvements necessary	

Appendix

SOC 225 Assignment

Final Project: An Intervention Targeting a Health Issue in a Specific Population

Interview or Research Project

For your final project you will research a health condition in a certain population, and based on your research, design an "intervention" that would improve the health of the population OR interview professionals that are part of a program/intervention that already exists. In other words, you will be researching non-clinical aspects of care, which can be done by the patient or within the community, that would make an impact on the patient (or at-risk) group.

Here are the components of the project:

- 1. *Health Issue*: choose a health issue specific to a set of social factors. This should be a specific disease/condition that impacts a certain population more than others.
- 2. **Research**: You will conduct research on the significance of the issue, the population that it impacts (that you will focus on), and the ways in which the condition can be managed.
- 3. Sources and Format:
 - 1. *OPTION ONE*: RESEARCH PAPER. At least 5 academic articles (or books). At least two must be documenting the health condition and at least three must be on evidenced-based strategies to manage it. Websites that are data-based (CDC, World Health Organization, Oregon Health Authority, Healthy Klamath) may count as sources.
 - 2. *OPTION TWO*: INTERVIEWS. At least 3 academic or government sources of data/background information, and at least 3 interviews with professionals (and clients, if possible) of a health program that targets social factors. At least two must be professionals who work in the program, and at least one must be a client, unless that is not possible. Use best judgement and consult the professionals in the program.
 - 3. *FORMAT*: The research paper option must be written. The interview option can be written OR it can be in a documentary video form if your interviewees are ok with being filmed. The video will not be shared broadly or with a public audience.

Topic Ideas for Final Project

Health Conditions	Populations	Projects/Program Types
Asthma	Children	Patient education
Diabetes	Adults	Exercise program

Heart conditions	Elderly	Wellness plan
High blood pressure	Hispanic	Phone intervention
Obesity	Other minority group	Survey/study
Stroke	Low SES	CAM practices
Immune disorders	Rural	Other behavior modification
Chronic pain	Veterans	Nutrition intervention
Behavioral issues	Tribes	Policy

Sample/Suggested Interview Questions:

Keep in mind that whether you do this project as a set of interviews, or as pure research, you will be assessed on the inclusion of the rubric components. Therefore, your interview questions should be designed to gather this information. You must include the answers to these questions in either format for the final project.

- What is the condition that this program targets?
- Who is the target population? What are their social factors?
- How does the program incorporate or target social factors?
- What are the barriers to health in this population?
- Where did the program come from? Who designed it?
- What people/roles are involved in the program? What are their backgrounds (education)?
- Who funds the program?
- How is the program sustainable?
- What are the program "outcomes"?
- How is the program assessed?

SOC 225 Medical Sociology Assignment #2/Final Project

DUE DATE: Monday December 13th, 2021 @ 11:59pm on Canvas

Final Project Goals:

- 1) Integrate feedback from Assignment #1. You will turn in one document that includes revisions and the new material. REVISIONS SHOULD BE MADE IN A DIFFERENT COLOR (BLUE).
- 2) Propose a program to address asthma in Klamath Falls. Should be different from current programs. (Give it a good name)
- 3) Connect a Sociological Theory to the objective, strategy, or need of the program.

Project Description:

- Everyone will have specific feedback on ways to improve your initial survey of Asthma. I want
 you to take that feedback and improve your Assignment #1. When you turn in this assignment
 (#2) YOU MUST INCLUDE YOUR REVISED ASSIGNMENT #1. All in one WORD
 document.
- You are tasked with coming up with an idea and proposal for a program that addresses Asthma (prevention, management, care) in Klamath. You may need to know a little bit about what is currently out there.
- You will need to use SOCIOLOGICAL THEORY to set-up the focus of your program. How does
 the objective of your project align with a sociological concept (Health Belief Model, Health
 Lifestyle Theory, Theory of Planned Behavior, Transtheoretical Model).
- The focus of the project should be Asthma but you can target particular groups or address a specific issue within such as cost, awareness, treatment, housing, or whatever you want.
- You should clearly identify the target population and justify WHY this population needs specific attention.
- You should clearly state the goals of the program.
- You should describe how the program would operate. (What does the program do?)
 - Also, where do you think this program would take place?
 - Are their partners in the community that might be interested in participating?
 - What type of resources would the program require?
 - You should include how the program will help people overcome potential obstacles in participating.
- FINALLY (but might be needed throughout), APPLY A SOCIOLOGICAL THEORY TO YOUR PROGRAM.
 - You can use a sociological theory to justify WHY the program is needed.
 - You can use a sociological theory to justify HOW the program will operate.
 - You can use a sociological theory to justify WHAT the goal of you program is.
 - You can use a sociological theory to explain just about any part of your program.
 - **You do not have to explain all of these, but you must use a sociological theory in your proposal**

Possible theories to use (This is just a list, it is not exhaustive):

- Fundamental Cause Theory
- Learned
 - Effectiveness
- Cultural Capital
- Order and Disorder in Neighborhoods
- Social

Construction of Gender and Illness

(Courtenay,

Lorber, Connell)

- Institutional Racism and
 - Health
- Hispanic Paradox
- Life Course Perspective (You

don't have to use all of the principles)

- Cumulative Advantage Theory
- Stress-Process

Model

- Symbolic Interaction
- StressExperienceTheory
- Looking-Glass Self
- Definition of the Situation
- Minority Stress Theory
- Dramaturgical Approach
- Health Lifestyles Theory
- Life Choices and Chances
- Habitus
- Health Belief Model
- Transtheoretical Model

- Theory of Planned Behavior
- The Sick Role
- Biopower
- Medical Gaze
- Medicalization
- Activity-Passivity
- Guidance-Cooperation
- Mutual Participation
- Interaction as Negotiations
- Social Construction of Illness
- Stigma and Illness
- Contested Illness
- Disability Theory

Format: Same as before. REFERENCE YOUR SOURCES BOTH IN TEXT AND IN REFERENCE PAGE!!!!!!

Literature Review:	High Proficiency (20) The work meets listed requirements for this criterion; little to no development needed The student clearly	Proficiency (17) The work meets most requirements; minor development would improve the work The student	Some Proficiency (12) The work need moderate development in multiple requirements The student	Limited Proficiency (10) The work does not meet this criterion: it needs substantial development in most requirements The student uses
Student demonstrates knowledge of research associated with the project	communicates important and relevant research. Answers all questions in prompt	somewhat clearly communicates important and relevant research. Answers most of the questions in the prompt.	presents research on the topic but lacks clarity on how the research is associated with the project. Answers most of the questions in the prompt.	inappropriate research to introduce the project and has an underdeveloped understanding of its importance. Does not address many questions from the prompt.
Student identifies social factors associated with the health issue	The student clearly and accurately identifies at least two social factors related the health issue.	The student mostly identifies at least two social factors related the health issue clearly and accurately.	The student does not both clearly and accurately identify at least two social factors related the health issue.	The student does not identify at least two social factors related the health issue.
Student explains how social factors are related to behaviors that influence the health issue.	The student clearly and accurately explains how social factors are related to the behaviors that influence the health issue.	The student somewhat clearly and accurately explains how social factors are related to the behaviors that influence the health issue.	The student somewhat explains how social factors are related to the behaviors that influence the health issue.	The student does not explain how social factors are related to the behaviors that influence the health issue.
Student uses sociological theory to explain the relationship between social factors and observed health issue.	The student clearly and accurately explains the relationship between a social factor and health issue using social theory. Student defines the theories appropriately.	The student clearly and accurately identifies, but does not fully explain the relationship between a social factor and health issue using social theory. Student defines the theories appropriately.	The student identifies the relationship between a social factor and health issue using social theory. Student somewhat defines the theories appropriately.	The student does not identify or explain the relationship between a social factor and health issue using social theory. Student does not define the theories appropriately.
Format and References	The student uses an appropriate	The student uses an appropriate	The student uses an appropriate	The student uses an inappropriate

referencing style and is consistent throughout the document. Studen	referencing style and is consistent throughout the document. Student	referencing style and is mostly consistent	referencing style. Student does not reference many portions of the
correctly references all materials within the document.	mostly references all materials within the document.	throughout the document. Student does not reference all materials within the document.	document.

Assignment #2 (1)										% Q ∰
Criteria				Ra	tings					Pts
Revisions Student uses feedback from Assignment 1 fully.	50 pts Fully Revisions Completely integrates feedback fr	t 1.	Some feedback No R				pts lo Revisions loes not integrate feedback.			
Program Description and Title The student provides a clear description of the program and gives a title.	20 pts High Proficiency The student provides a clear description of the program and gives a title.	provides a description and gives a title, but m pints.					10 pts Limited Proficiency The student does not provide a description of the program or title.	20 pts		
Operation Description The student fully addresses what the program does and answers all questions clearly.	10 pts High Proficiency The student fully addresses what does and answers all questions clean		Proficiency The student addresses what the program does				2 pts Limited Proficiency The student somewhat addresses what the program does and answers some of the questions clearly		10 pts	
Theory Application Student applies social theory appropriately and clear to the program, addressing the how, what, why components.	High Proficiency Student applies social theory appropriately and clearly to the program, addressing the how, what,		orbiciency udent applies social theory propriately and somewhat clearly to the ogram, addressing the how, what, why ad		12 pts Some Proficiency Student identifies social theory appropriately and somewhat addresses the how, what, why components.		10 pts Limited Proficiency Student does not apply social theory appropriately and clearly to the program.	20 pts		
Student applies social theory appropriately and clear to the program, addressing the how, what, why	High Proficiency Student applies social theory appropriately and clearly to the program, addressing the how, wha	17 pts Proficiency Student applies social th appropriately and somev		Some Proficie y Student ident t clearly to the v, what, why addresses the		ciency 10 pts Limited Proficiency Initifies social theory Student does not appl theory appropriately a the how, what, why clearly to the program		Limited Proficiency Student does not apply social theory appropriately and		