PHM Program Assessment 2017-2018

Section 1 - 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. 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 Educational Objectives

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:

- 1. Work in a wide range of positions related to assessing, improving, or evaluating systems related to population health.
- 2. Pursue advanced degrees or training in areas of Population Health, Public Health, Sociology, Social Work Medical School, Nursing School, or Health Science-related fields.
- 3. Communicate effectively in the field of health and health care as well as everyday life.
- 4. Critically and ethically assess the role of organizations and systems that influence population health.

Section 3 – Program Description and History

The PHM program is rooted firmly in the social sciences, because the strategies that promote health and reduce unnecessary healthcare costs must take into account social, economic, and environmental factors in order to be successful. Thus, while the social sciences can offer students broad context in the realms of healthcare and public health, a social science approach also provides students more concrete skills. Students learn to collect, analyze, and translate data into actionable steps, and have the contextual knowledge of how bureaucracies, policies, financial impact, and funding sources informs taking those steps. The learning outcomes of the PHM program speak to a continuous feedback loop for quality improvement in any industry: identifying quality metrics, linking data findings to evidenced-based approaches, coordinating program implementation, and establishing evaluation mechanisms. The knowledge gap in this process lies in the black box of the population being addressed. In other words, hospitals, schools, social services, non-profits, and the like can research best practices on improving a given outcome (heath screenings, graduation rates, etc.), but if no localized research is done, approaches may fail even if they are evidenced based. It is for this reason that the PHM program gives students the tools to blend social science research with clinical care gap analytics, and subsequently provide real world experience using these tools to address local health issues.

Students in the PHM program begin with foundational courses in applied and medical sociology, with emphasis electives in applied psychology, management, mathematics, communication, and health sciences, finishing in one of three tracks: *Health Counseling/Outreach*, *Care Management and Coordination*, and *Applied Health Data Analytics*.

The PHM program began in the 2015-2016 academic year. In the past three years, enrollment has varied from 20-32 majors. 100% of our graduates are either employed or in graduate programs. According to our latest alumni survey (only 3 responses), our graduates have an average starting salary of \$40,000.

The PHM program faculty and students have a wide range of community and industry partners. Our students have been involved in research and community improvement projects that align with course materials with the following organizations:

- Klamath County Public Health
- Oregon Public Health Institute
- Hope Rising Non-Profit
- YMCA
- Integral Health Services
- OSU Extension
- Klamath Tribal Health and Family Services
- Blue Zones Project
- Cascade Health Alliance
- Sky Lakes Medical Center
- Sky Lakes Wellness Center

- Cascades East Family Medicine Clinic
- OHSU Rural Campus
- Klamath County Food Bank
- Prepare Redmond
- Red Cross of America
- Chiloquin First Coalition
- Klamath Regional Health Equity Coalition
- Healthy Klamath
- Mountain View Medical Center
- Klamath City School District

Section 4 – Program Student Learning Outcomes, 2018-2019

The following learning objective represent a series of skills, abilities, and experiences expected of BPHM students. The outcomes are integral to the learning experience of students. Each student will be expected to accomplish these outcomes in multiple courses. From these objectives, a number of specific and measureable outcomes are assessed through specific assignments, exams, and projects.

- 1. Students will demonstrate knowledge of basic theoretical frameworks of sociology and demonstrate an ability to apply social theory to behavioral trends.
- 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;
- 3. Students will synthesis ideas related to cultural competency and demonstrate skills related to cultural competency.
- 4. Students will demonstrate an understanding of the sociological research methods, including an ability to organize, analyze, and present data.
- 5. Students will demonstrate an understanding of the roles, functions, and responsibilities of healthcare professionals and patients, including alternative approaches to healthcare.
- 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.

Assessment Methods

A wide variety of assessment data points were discussed by faculty after program outcomes were established. Potential data points include:

- in-class exams and quizzes on key theories and concepts
- discussions of sociological trends
- final projects demonstrating ability to conduct research projects and present results
- student self-assessment of externship experience
- evaluation of student performance by externship site supervisors
- student feedback on course evaluations
- student performance on comprehensive exams
- student performance on statistical exercises
- evaluation of group research project for external agency
- external agency evaluation of student performance on applied research projects

Section 5 – Curriculum Map

COURSE	PSLO	PSLO	PSLO	PSLO	PSLO	ESLO	ESLO	ESLO	ESLO	ESLO	ESLO
	1	2	3	4	5	1	2	3	4	5	6
SOC	F						F				F
204											
SOC		F					F				F
225											
SOC			P				P	F		P	
301											
SOC				F							
335											
SOC					С						C
407											

Section 6 – Assessment Cycle

Three-Year Cycle for Assessment of Student Learning Outcomes

Table 1. Learning Outcomes	'15-16	' 16-17	'17-18	'18-19
1. Students will demonstrate knowledge of basic theoretical frameworks of sociology and demonstrate an ability to apply social theory to behavioral trends.		X		
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; students will demonstrate cultural competency.	X			X
3. Students will demonstrate an understanding of the sociological research methods, including an ability to organize, analyze, and present findings.	X			X
4. Students will demonstrate an understanding of the roles, functions, and responsibilities of healthcare professionals and patients, including alternative approaches to healthcare.		X		
5. Students will demonstrate an understanding of health behavior change and the ability to practice techniques to assist others with health-seeking behavior changes.			X	

Section 7 – Methods of Assessment Summary of 2017-2018 Assessment Activities

The PHM faculty conducted formal assessment of Outcome #5 during 2017-2018.

Student Learning Outcome #5:

Students will demonstrate an understanding of health behavior change and the ability to practice techniques to assist others with health-seeking behavior changes.

Direct Assessment #1

The faculty assessed this outcome in SOC 225, Medical Sociology, in the Winter 2018 term using rubric-scored final projects. There were 30 freshman, sophomore, junior, and senior students involved in the assessment. 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

Performance Criteria	Assessment	Minimum	Results
	Method	Acceptable	
		Performance	
Identifies health issue	Final project,	75% or more at	100%
	rubric	10	
Explains behavior change based on	Final project,	75% or more at	100%
social factors	rubric	10	
Links research to intervention	Final project,	75% or more at	100%
	rubric	10	
Demonstrates understanding of	Final project,	75% or more at	70%
evaluation methods to determine	rubric	10	
success of intervention			

Direct Assessment #2

The faculty assessed this outcome in SOC 407, Research Center, in Spring of 2018.

Table 3. Assessment Results for PLO #5 in SOC 225, Spring 2018

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Performance on evaluation of health behavior change intervention as part of field work for an external organization	Final Report	Point scale, % at 80% +	75% at 80% +	50%

Indirect Assessment

The faculty assessed this outcome in SOC 407 Research Center, based on debriefing with an external agency.

Table 4. Student self-assessment for PLO #5 in SOC 407, in spring 2018.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results	
Students demonstrated an understanding of behavior change in target population	External agency interview	Pass/Fail	80% at Pass	50%	

Section 8 – Evidence of Improvement in Student Learning

None to date.

Section 9 – Changes Resulting from Assessment

Program Assessment Changes and Future Directions

Over the past three years, the curriculum of the PHM program has changed slightly. The program has added more sociological course to the core requirements and has added several applied courses outside the PHM program such as (GIS and Health Informatics). Moving forward the philosophy of assessment will largely remain the same, with a few exceptions. The organization of program assessment will shift to align more so with University assessment procedures. Specifically, we aimed to more closely align the timing of assessment for Essential Student Learning Outcomes and Program Learning Outcomes.

Additionally, we plan to slightly change some of the language of the PLOs to better reflect the education philosophy and mission of the PHM program.

- 1. Learning Outcome #2 We will separate "demonstrate understanding of the impact of such factors as culture, ethnicity..." from "demonstrate culturally competency". The impact of social factors is a topic covered by most course in a variety of contexts. Cultural competency is a specific skill that is developed in only a few core courses. It would be more appropriate to assessment cultural competency separately.
- 2. Learning Outcome #5 We will alter the language "the ability to practice techniques to assist others with health-seeking behavior changes" to "demonstrate the skills need to assessment programs, interventions, and activities aimed at changing health-related behavior." While behavior change is a goal of population health improvement, the PHM program trains individual to evaluate the methods by which behavior change is

possible. Exposure to methods of behavior change does occur. However, the primary learning objective is not to practices techniques related to behavior changes, but to be able to evaluate the effectiveness, utility, and feasibility of new and existing methods to change behavior.

Table 5. Learning Outcomes (Revised)	'18-19	'19-'20	' 20-21	'21-'22
1. Students will demonstrate knowledge of basic theoretical frameworks of sociology and demonstrate an ability to apply social theory to behavioral trends.		X		
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;	X			X
 Students will synthesis ideas related to cultural competency and demonstrate skills related to cultural competency. 			X	
4. Students will demonstrate an understanding of the sociological research methods, including an ability to organize, analyze, and present data.	X			X
5. Students will demonstrate an understanding of the roles, functions, and responsibilities of healthcare professionals and patients, including alternative approaches to healthcare.			X	
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.		X		