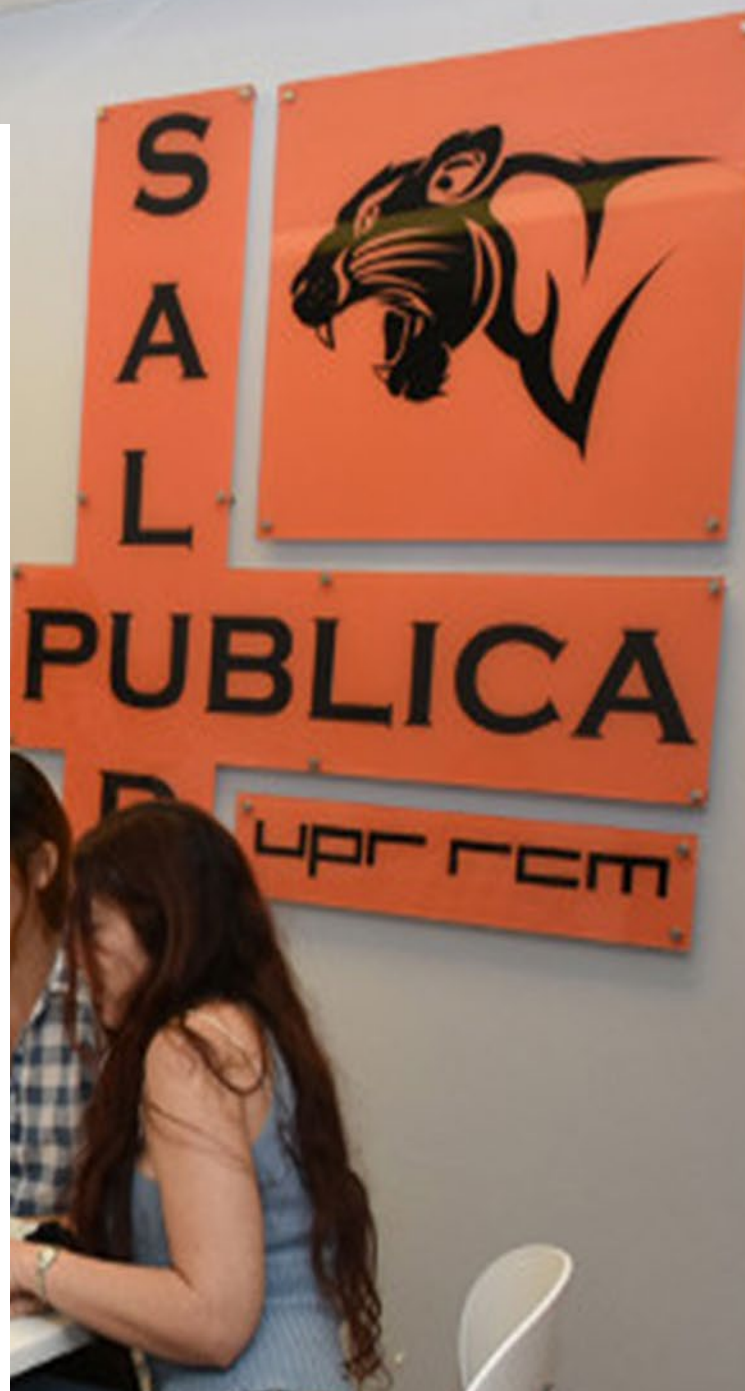


Self-Study Report

PREPARED FOR THE COUNCIL ON EDUCATION
FOR PUBLIC HEALTH



October 15, 2021

Graduate School of Public Health
Medical Sciences Campus
University of Puerto Rico



UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
FACULTY OF BIOSOCIAL SCIENCES AND
GRADUATE SCHOOL OF PUBLIC HEALTH

Self-Study Report



Submitted to the
Council on Education for Public Health
For reaccreditation for the School

October 15, 2021

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Abbreviations

(Some abbreviations are based on Spanish acronyms)

Abbreviations	Title
ACNM	American College of Nurse-Midwives
ADSS	Health Services Administration
AGHE	Association for Gerontology in Higher Education
AHRQ	Agency for Healthcare Research and Quality
AIHA	American Industrial Hygiene Association
AMCB	American College of Nurse-Midwifery Certification Council
ASSMCA	Administration of Mental Health and Anti-Addiction Services
ATMCH	Association of Teachers of Maternal and Child Health
AUCD	Association of University Centers on Disabilities Research, Education and Service
AUPHA	Association of University Programs in Health Administration
AY	Academic Year
CAD	Administrative and Academic Affairs Committee
CAHME	Commission on Accreditation of Healthcare Management Education
CEPR	Puerto Rico Council on Education
CIDE	Center for Demographic Research
CIES	Center for Evaluation and Sociomedical Research
DECEP	Continuing Education Division
GSPH	Graduate School of Public Health
HSAM	Health System Analysis and Management
IRB	Institutional Review Board
MSCHE	Middle States Commission on Higher Education
MBRS	Minority Biomedical Research Support
MHSN	Master of Health Sciences in Nutrition
MSC	Medical Sciences Campus
NCHES	National Committee Health Education
OCFA	Office of Contracts and Financial Management
PHSSR	Public Health Services and Systems Research
PR	Puerto Rico

Abbreviations	Title
PRCE	Puerto Rico Council on Education
PRCTRC	Puerto Rico Clinical and Translational Research Consortium
PRF – PHTC	Puerto Rico Florida Public Health Training Center
PRHSRI	Puerto Rico Health Services Research Institute
PROTECT	Puerto Rico Test Site for Exploring Contamination Threats Program
RCMI	Research Centers in Minority Institutions
RF	Resource File
SDH	Social Determinants of Health
SLO	Student Learning Outcomes
UPR	University of Puerto Rico
UPRCCC	University of Puerto Rico Comprehensive Cancer Center

Introduction

1) Describe the institutional environment, which includes the following:

a. *year institution was established and its type (eg, private, public, land-grant, etc.)*

The Medical Sciences Campus (MSC) is part of the University of Puerto Rico (UPR) System, an 11 campus, state-supported institution of higher education licensed by the Puerto Rico Council on Education (*CEPR, for its Spanish acronym*) (Certification CEPR 2018-4641). The UPR was founded in 1903 and since then has been the premier state-sponsored institution for the formation of professionals in Puerto Rico. The MSC was founded in 1966 as one of the UPR System's campuses which in time incorporated the schools of Medicine (1950), Pharmacy (1913), Dental Medicine (1957), Public Health (1970), Health Professions (1976), and Nursing (1995).

b. *number of schools and colleges at the institution and the number of degrees offered by the institution at each level (bachelor's, master's, doctoral and professional preparation degrees)*

The MSC is composed of six schools: Medicine, Pharmacy, Dental Medicine, Public Health, Health Professions, and Nursing. **TABLE I.1.b.1** provides the number of academic and professional programs in the MSC by degree level.

TABLE I.1.b.1. UPR Medical Sciences Campus Academic Programs by Degree Level	
Degree Level	Number of Programs
Associate Degree Programs	3
Bachelor's Degree Programs	6
Master's Degree Programs	30
Doctoral Degree Programs	9
First Level Professional Programs	6
Post- baccalaureate Certificate Programs	3
Graduate and Professional Certificate Programs	4
Dental Medicine Certificate Programs	5
Post-Graduate Residency Program	1
Post-Doctoral Certificate and Medical Residency Programs	41
Total Academic Programs	66

c. *number of university faculty, staff, and students*

The MSC community profile for AY 2020-2021 is presented in **TABLE I.1.c.1.**

TABLE I.1.c.1. UPR Medical Sciences Campus Profile AY 2020-2021	
Category	Number
Faculty	887
Staff	1,222
Undergraduate Students	363
Graduate Students	1,882
Residents	447
Total Student and Residents Population	2,692

d. *brief statement of distinguishing university facts and characteristics*

The UPR has undergone various changes throughout the years but its importance to Puerto Rico's economic development, through the formation of an educated workforce and a middle-class, was evidenced in Law 2 of 1966. This law established a formula whereby the UPR received 9.6% of the Government of Puerto Rico's revenue. This was planned as an investment in the transformation of the Puerto Rican economy. Until recently the government appropriation funded around 70% of the UPR's budget.

The MSC was founded in 1966 as one of the UPR System's campuses which in time incorporated the schools of Medicine (1950), Pharmacy (1913), Dental Medicine (1957), Public Health (1970), Health Professions (1976), and Nursing (1995). The MSC is a multidisciplinary and interprofessional educational and research/service center for the health sciences and professions. Its importance in Puerto Rico's Health System is evidenced by its location and intimate relationship with Puerto Rico's Health Center, which groups a series of hospitals and other health services for the provision of general and specialized tertiary and quaternary care. The MSC schools have had a central role in the Puerto Rico health system. The Graduate School of Public Health (GSPH), for example, had an instrumental role in the regionalization of health services in the Island in the late 1950s, a plan by which primary, secondary, and tertiary care services were delivered in a coordinated fashion throughout the Island in order to maximize utilization of resources. And the faculty and residency programs in the School of Medicine are essential in the Puerto Rico Medical Center where tertiary care is provided. The MSC also has many unique programs for the formation of health professionals and specialists in Puerto Rico.

e. *names of all accrediting bodies (other than CEPH) to which the institution responds. The list must include the regional accreditor for the university as well as all specialized accreditors to which any school, college or other organizational unit at the university responds (list may be placed in the electronic resource file)*

The MSC regional accreditor is the Middle States Commission on Higher Education (MSCHE). The next Self-study evaluation for MSCHE reaccreditation is in 2021-22 and the site visit is scheduled for November 2021. The GSPH has one program accredited by the Commission on Accreditation of Healthcare Management Education (CAHME). **TABLE I.1.e.1** lists all accreditation bodies for the various schools and programs of the MSC campus. All accreditations are in good standing as of June 17th, 2021.

TABLE I.1.e.1 MSC Regional, School and Program Accrediting Organizations
Regional Accreditation Agency
Middle States Commission on Higher Education (MSCHE)
School Accreditation Agencies
Liaison Committee on Medical Education (LCME)
Accreditation Council for Graduate Medical Education (ACGME)
Commission on Dental Accreditation of the American Dental Association (CODA-ADA)
Council on Education for Public Health (CEPH)
Accreditation Council for Pharmacy Education (ACPE)
Commission on Collegiate Nursing Education (CCNE)
Academic Program Accreditation Agencies
Commission on Accreditation of Healthcare Management Education (CAHME)
Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO)
Commission on Dental Accreditation of the American Dental Association (CODA-ADA)
Joint Review Committee on Education in Radiologic Technology (JRCERT)
Committee on Veterinary Technicians Education and Activities-American Veterinary Medicine Association (CVTEA-AVMA)
Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association (CAPTE-APTA)
Council on Academic Accreditation of the American Speech-Language-Hearing Association (CAA-ASHA)
Commission on Accreditation for Dietetics Education of the American Dietetic Association (CADE-ADA)
Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCEPNMT)
National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
Accreditation Council for Occupational Therapy Education of the American Occupational Therapy Association (ACOTE-AOTA)
Cytotechnologist Programs Review Committee of the Commission on Accreditation of Allied Health Education Programs of the American Society of Clinical Pathology (CPRC-CAAHEP-ASCP)
Commission on Accreditation of Health Informatics and Information Management Education (CAHIIM)
Commission on Accreditation of Allied Health Education Programs (CAAHEP)

f. brief history and evolution of the school of public health (SPH) or public health program (PHP) and related organizational elements, if applicable (eg, date founded, educational focus, other degrees offered, rationale for offering public health education in unit, etc.)

The GSPH had its origin in the School of Tropical Medicine, which was founded in 1926 with support from the Rockefeller Foundation and under the auspices of Columbia University. The School of Tropical Medicine soon became a renowned center for research and postgraduate studies.

In 1941, at the request of the Department of Health, the School of Tropical Medicine developed graduate courses in the field of public health. These were primarily courses in sanitary engineering leading to a Master of Sanitary Sciences developed as a response to the need for specialized personnel

in that area. Subsequently, programs toward the Master of Public Health, Master of Health Education, and Master of Nursing were developed.

On May 15, 1949, the Puerto Rico Legislature approved Public Law No.378 authorizing the creation of a School of Medicine at the University of Puerto Rico. The school began operations in the fall of 1950. The Department of Preventive Medicine and Public Health was part of the School of Medicine from its inception. It offered courses in preventive medicine and public health to medical students. In 1955, the Department of Preventive Medicine and Public Health was accredited by the American Public Health Association, a function carried by APHA until 1974 when the Council on Education for Public Health was created. In 1956, the school (still a department of the School of Medicine) assumed an important role in the regionalization of health services in the Island, a plan by which primary, secondary, and tertiary care services were delivered in a coordinated fashion throughout the Island in order to maximize utilization of resources. The school's primary role was and continues to be to train the necessary human resources to deliver many of those services, and one of assessing health needs in the community in order to respond with relevant curricular changes.

Due to the outstanding contribution of the Department of Preventive Medicine and Public Health and its teaching programs in the development and organization of health care services in the Island, and due to the growth of its programs, the Academic Senate of the Medical Sciences Campus recommended the creation of the Graduate School of Public Health. On January 27, 1970, the Council on Higher Education authorized, through *Certification 42*, the creation of the Graduate School of Public Health of the Medical Sciences Campus, which comprised 13 programs. The School thus gained independent status. In 1972, the Medical Sciences Campus moved from the old building of the School of Tropical Medicine in San Juan to a new 10-story building near the University Hospital and other health institutions within the Puerto Rico Medical Center in Río Piedras. That same year the Graduate School of Public Health moved to its facilities within the new building. In 1976, the Council on Higher Education authorized a total reorganization of the Medical Sciences Campus (MSC). As part of that reorganization, the School became the Faculty of Biosocial Sciences and Graduate School of Public Health.

In 1981, following the recommendation of the faculty, the School was reorganized into five departments: Health Services Administration, Biostatistics and Epidemiology, Environmental Health, Human Development, and Social Sciences. This new organization reflected more adequately the School's mission, goals, its interdisciplinary character, and commitment to train a new type of public health professional. The eighties were a decade of growth and strengthening of the School's programs in response to social needs and areas of concern in the field of public health. It was a period of development of the biosocial sciences, as evidenced by the creation of the Center for Census Data, the Center for Sociomedical Research, and the Center for Demographic Research. In keeping with the needs of an aging population, the School also created a graduate certificate in Gerontology. It was also involved in outreach efforts through continuing education, extension and extramural courses and programs. In 1984 and 1985, it began offering a Master of Science with specialty in Environmental Health and a Master of Public Health evening program. An extramural program with the University of Cádiz, Spain, began in 1986. Through this collaborative effort, the faculty offered courses at the University of Cádiz leading to the Master of Public Health and a Master of Science with specialty in Environmental Health.

In 1993, the School established the Child Development Center as an exemplary service center, practicing inclusion of infants and toddlers from two months to three years of age. New additions to

the School's academic offerings in the 1990s included a graduate certificate in Developmental Disabilities-Early Intervention, offered by the Center for Developmental Disabilities through the Human Development Department, and an MPH program with a specialty in Gerontology and a program leading to a Master of Public Health Education, both offered as evening programs. In 1996, the Occupational Health Program became a Master of Science with specialty in Industrial Hygiene. In 1998-1999 the Department of Human Development added two new programs, a Master of Public Health with specialty in Nurse Midwifery and a Graduate Certificate in Nurse-Midwifery. These programs prepared professionals in the women's health care area, particularly in the processes of pregnancy and childbirth, as well as, in family planning and newborn care.

In 1999-2000, the School began offering the Doctor of Public Health with a specialty in Environmental Health degree. A second DrPH program in Health Systems Analysis and Management began in 2010-2011 and a third one in Social Determinants of Health began in 2011-2012.

Socioeconomic and Political Context of the UPR Graduate School of Public Health (GSPH)

The GSPH has a unique context in comparison to other schools in the continental United States. It is important to recognize the school's social, economic, and cultural context to understand its place and role in Puerto Rican society and its unique characteristics. For this reason, a brief social and political context of the school is presented for the benefit of the CEPH Board and reviewers.

Puerto Rico is a Caribbean Island located between the Caribbean Sea and the North Atlantic Ocean, east of the Dominican Republic. It is the smallest of the Greater Antilles. It includes the main island and a number of smaller islands and keys, including Mona, Vieques, and Culebra. The main island measures 3,500 square miles. It is mostly mountainous with large coastal areas in the northern and southern regions.

The Taíno Indians that populated the island for centuries before the arrival of Europeans called the island "Borikén", which was later pronounced by the Spaniards as "Borinquen." The island was claimed by the Spanish Crown in 1493 in Columbus' second voyage. The native Taínos, were subjected to hard labor and exposed to diseases that greatly reduced the population. African slaves were brought to the Island for agricultural activities, particularly sugar cane. Slavery was abolished in 1873. Intermarriages between Europeans, Taínos, and Africans led to a population of mixed ancestry. As a result of the Treaty of Paris, that ended the Spanish-American War, Spain ceded Puerto Rico to the United States in 1898. The Jones Act of 1917 granted US citizenship to Puerto Ricans. As a result, Puerto Ricans have served in the US military in all wars since World War I.

In 1952, Puerto Rico became a Commonwealth and as such, elects' governors and legislators for four-year terms and a U.S. congressional representative—the Resident Commissioner—who has voice, but no vote in the House of Representatives. Political parties have evolved over the 20th century and have platforms supporting one of three formulas of government—commonwealth, statehood, or independence. Plebiscites held in 1967, 1993, 1998, and 2012 have not lead to a change in political status.

The government of Puerto Rico is based on the Republican system and is composed of three branches: the executive branch headed by the governor, the legislative branch consisting of a bicameral legislature (a Senate and a House of Representatives) and the judicial branch. The legal system is based on the Spanish civil law system but has incorporated numerous elements of the common law system by its relation to the US judicial system. As the 50 states, the Island has a state court system and a Supreme Court, as well as federal courts. In the federal court system Puerto Rico is under the Circuit Court of Boston and ultimately, the US Supreme Court. Members of the Judicial Branch are appointed by the governor and confirmed by the senate. Puerto Rico is divided into 78 municipalities, each of which elects a mayor and a municipal legislature.

The official languages of Puerto Rico are Spanish and English. Spanish is the primary language used in government and business. English is taught in schools through high school and in college. While Spanish is the vernacular language, many Puerto Ricans are bilingual or have some knowledge of English.

Migration has been a major part of Puerto Rico's history. Besides the forced migration of African slaves, during the 19th century immigrants came from Spain, and to a lesser extent, from other Latin American countries. In the 20th century, Puerto Ricans migrated in large numbers to New York and

other northeastern cities. During the last two decades of the 20th century, migration extended to southern cities, such as Orlando, Miami, and Atlanta. Census data indicates that about four million Puerto Ricans live in the continental United States.

In the early 1900s the main component of Puerto Rico's economy was agriculture. In the late 1940s an economic initiative called Operation Bootstrap sought the development of manufacturing industries throughout the island by offering tax exemptions to corporations willing to establish factories in the Island. In a period of less than thirty years, manufacturing replaced agriculture as the main source of employment. The economic conditions in Puerto Rico have improved dramatically since the 1940s mostly due to external investment in capital-intensive industries such as petrochemicals, pharmaceuticals, and the tourist industry.

The end of the 20th century saw the end of tax exemptions to industries investing in Puerto Rico. This contributed to the relocation of some industries to Latin American and Asian countries. Puerto Rico has not been the exception to the challenging global economic situation. This is demonstrated by a per capita GDP (at constant 1954 dollars) estimate of \$2,861 for 2013, which shows a decrease from the \$3,034 level measured in 2004. After accounting for inflation and a decrease in the total population of the island, this represents a reduction of 5.7% in the per capita income of the average citizen. This economic deceleration has had a direct effect on University of Puerto Rico resources, since the university received 9.6% of all Puerto Rico tax revenues. For comparison, in 2019, Puerto Rico had a 43.5% poverty rate, according to the US Census Bureau, which doubles that of the poorest state in the US (Mississippi) with a poverty rate of 19.6% in 2019.

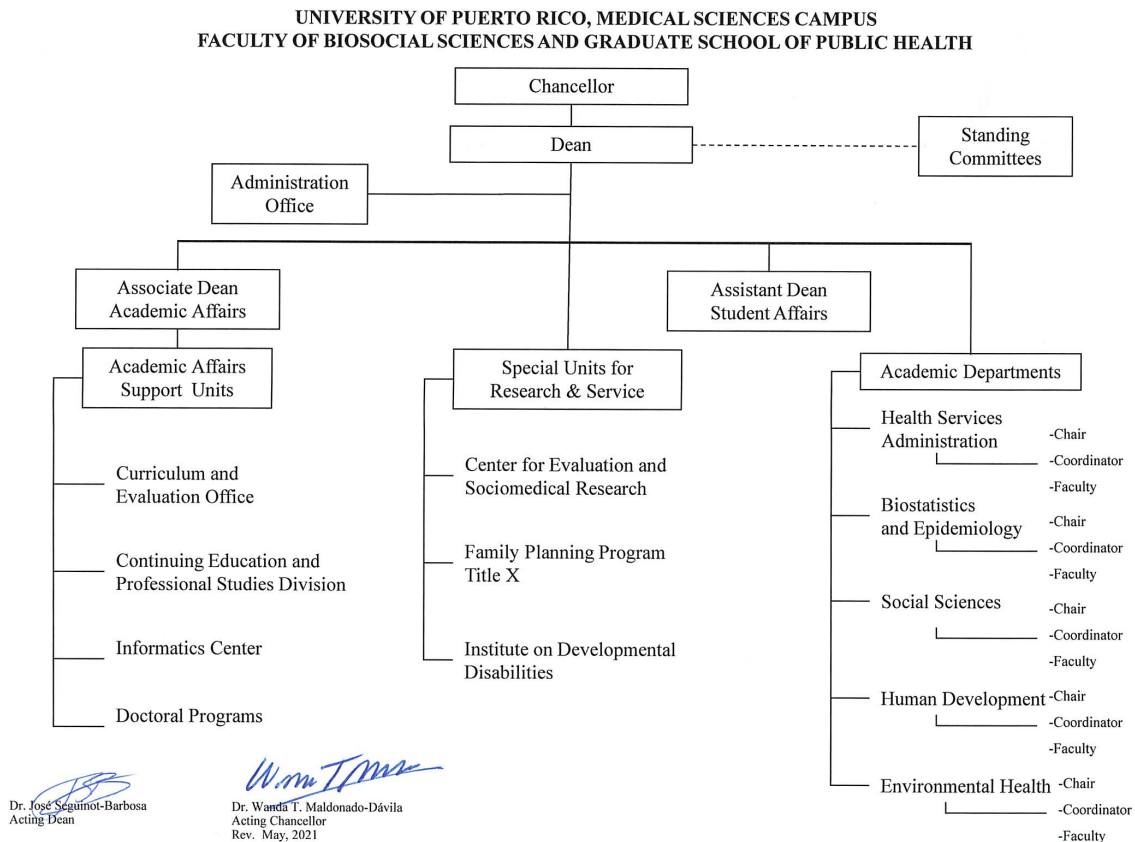
During the second decade of the 20th century the Commonwealth of Puerto Rico has been in a profound fiscal, economic and liquidity crisis, the culmination of many years of significant governmental deficits, a prolonged economic recession, high unemployment, population decline, an aging population and high levels of debt and pension obligations. Moreover, the Commonwealth had incurred in recurring deficits that impeded access to credit markets. Recently, the economic, financial, and social situation of Puerto Rico has worsened even further due to the natural and major catastrophic events occurred since 2017 like hurricanes Irma and Maria, strong earthquakes in the southwest part of the island, and the recent and ongoing COVID-19 pandemic. As a result of the economic crisis the U.S. Congress passed the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA) enacted in 2016 which places Puerto Rico's finances and policies under an Oversight Board. The University of Puerto Rico (UPR) being a state university with deep ties to the state, is a covered entity of the Oversight Board under Title III of PROMESA. These fiscal challenges by the Commonwealth have driven a significant reduction in appropriations historically directed towards UPR's operations in recent fiscal years. Prior to the start of PROMESA law, the Commonwealth funded approximately \$833 million or 72% of the UPR's annual expenses. The remaining 30% was backed by the University's own revenues and federal funds. In contrast, the funding structure of most mainland public universities is based on a majority coming from tuition, federal funds, and self-produced revenues. It is important to note that given the high poverty rates among the Puerto Rican population the same economic model of tuition sustenance are not as viable in Puerto Rico, and that the UPR system has historically been a means of economic development on the Island. Under PROMESA law the UPR's Commonwealth appropriations have been reduced by over \$330 million through Fiscal year 2020. On June 5, 2019, the Oversight Board of PROMESA certified its own fiscal plan for the University for the fiscal years 2019 to 2024 (the UPR 2019 Fiscal Plan). The UPR 2019 Fiscal Plan maintains the University's existing operational model of eleven campuses and includes the approved further

projected reductions in the Commonwealth's formula appropriations. The UPR system and by extension the GSPH is in a process of transition to these external events.

2) Organizational charts that clearly depict the following related to the school or program:

a. the school or program's internal organization, including the reporting lines to the dean/director.

FIGURE 12.a.1 Graduate School of Public Health Organizational Chart



The GSPH has five academic departments: Biostatistics and Epidemiology, Environmental Health, Health Services Administration, Human Development, and Social Sciences (**FIGURE 12.a.1 - GSPH organizational chart**). Administrative units include the Office of the Dean, the Office of the Associate Dean for Academic Affairs, the Office of the Assistant Dean for Student Affairs, and two administrative support offices, which are the Administration Office and the Office of Curriculum and Evaluation. There are various school-wide research and service programs, which respond directly to the Office of the Dean or Associate Dean. These are: the Center for Evaluation and Sociomedical Research (CIES, for its Spanish acronym), the Title X Family Planning Program, the Institute on Developmental Disabilities, and the Division of Continuing Education (DECEP).

Dean, Associate Dean, and Assistant Dean - The **Dean** is the chief executive officer of the School and, as such, is responsible for overseeing all academic and administrative matters. The functions of the Dean, as defined in the *Graduate School of Public Health Bylaws* include the following: representing the GSPH in the MSC Administrative Board; participating as an ex-officio member on all school standing committees and the UPR-MSC Academic Senate; preparing budget petitions and other reports as requested by the chancellor; implementing the school's annual work plan developed in collaboration with the Administrative and Academic Affairs Committee based on the *Strategic Plan*; submitting recommendations regarding faculty appointments, promotions and tenure; and overseeing all school administrative processes that support and facilitate teaching, service, and research efforts.

The **Associate Dean for Academic Affairs** is responsible for overseeing the GSPH's day to-day academic operations. Additional responsibilities of this position include supervising the Office of Curriculum and Evaluation and DECEP personnel, coordinating academic programming and procedures with the Office of the Registrar; chairing the Doctoral Committee; assuring compliance with academic rules and regulations regarding admissions, grading, and promotion; representing the GSPH in the UPR-MSC Committee for Integration and Educational Programming; and representing the Dean in his/her absence. Moreover, the Associate Dean for Academic Affairs is a member of the Strategic Planning Committee and the Administrative and Academic Affairs Committee, and is an ex-officio member of the Curriculum Committee. The Associate Dean is responsible for the Doctoral Program core areas, as established in the *GSPH Bylaws*. The responsibilities related to the Doctoral Program are the following: to oversee the implementation and evaluation of the doctoral program in coordination with the academic departments and the Doctoral Committee; to coordinate Doctoral Committee meetings and implementation of the work plan; to assure compliance with course offerings and evaluations; to oversee student counseling, promotion, and graduations; and to provide information to faculty and students about the doctoral program's procedures and bylaws.

The **Assistant Dean for Student Affairs** oversees all student activities and offers support to the academic programs in their recruitment and admissions processes. It also offers academic and career guidance and personal counseling services to students and coordinates alumni activities. Year-round support services provided to students include lectures and workshops on stress management, study skills, anxiety reduction, and writing skills, all coordinated by a certified counselor. The office also provides career and employment information to students and alumni. Although placement services are not formally provided, referrals are made to public and private health agencies. Faculty members offer academic advising to students and may refer students experiencing academic difficulty to the Office for Student Affairs for specialized counseling services. This office also has a resource center to provide students and alumni with information on educational programs and opportunities. The Assistant Dean for Student Affairs is a member of the Strategic Planning Committee and the Administrative and Academic Affairs Committee.

School-Wide Support Offices - The **Administration Office** supports all GSPH units and works closely with the Dean. This office offers a broad range of services such as purchasing, accounting, human resources transactions, and physical space maintenance and administration. It is headed by the School Administrator. The **Office of Curriculum and Evaluation** was established to offer technical support to the faculty in curricular matters. It oversees the GSPH's curricular development, program evaluation, and assessment processes. It is also responsible for overseeing the course evaluation system and developing strategies for the improvement of teaching based on course evaluations. Staff members offer support to the Office of the Associate Dean for Academic Affairs in matters pertaining to the development of academic programs and compliance with campus policies and procedures. The Curriculum and Evaluation Office also supports program accreditation activities and the development

and submission of the GSPH's annual report to the MSC Institutional Planning Office. The systematic review of the school's curricula is a top priority for the office. This will require a reassessment of the current staffing to assure that the curricular revision may be completed as planned. The existence of three doctoral programs has increased the responsibilities of the office.

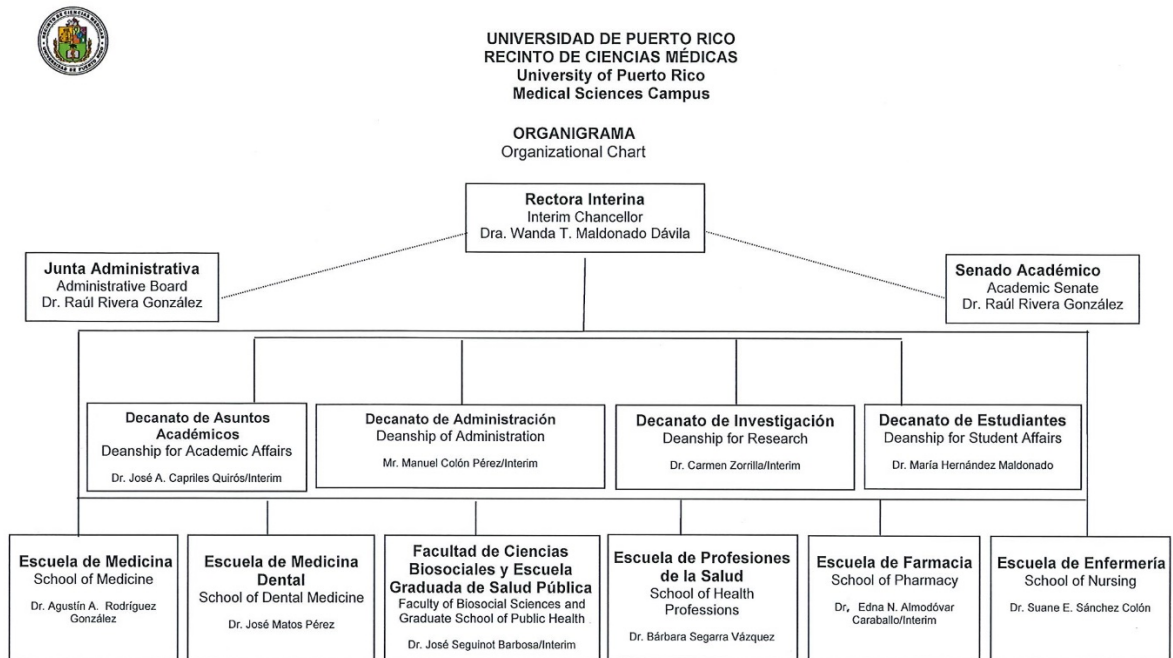
Special units for research and services - Research and service units include the Computer Center (4 laboratories), Family Planning Program Title X, Center for Evaluation and Sociomedical Research, the Institute on Developmental Disabilities, and the Puerto Rico Autism Center.

Academic Organization - The GSPH is organized in five academic departments, each one responsible for its programs, research, and service activities. The departments are Biostatistics and Epidemiology, Environmental Health, Health Services Administration, Human Development, and Social Sciences. Their functions and prerogatives are established in the *UPR General Bylaws* (2002). **Department chairpersons** are appointed by the Chancellor, based on the Dean's and faculty recommendation. The primary responsibilities and duties of department chairpersons include: presiding over department meetings; representing the department at the school, campus and university levels; and ensuring that agreements reached by department faculty are complied with and, when deemed appropriate, brought before higher administrative authorities. In addition, the chairperson assigns the faculty academic load, appoints program coordinators, assesses academic resource needed, participates in the assessment of the professional competence of persons recruited, and evaluates and recommends faculty for promotion and tenure. The department chairperson is also responsible for overseeing the continuous evaluation of program operations and fostering faculty professional development. Each academic program within a department is headed by a **Program Coordinator** who is a member of the faculty of the program he/she coordinates. His/her responsibilities include: implementation of the established curriculum; coordination and supervision of all curricular matters; curriculum evaluation; overseeing services offered to students, such as course registration; academic counselling and tutorial assistance; and coordinating the admissions process for the specific program.

Standing Committees - The GSPH has eight standing committees which advise the Dean on academic and administrative matters. The committees are: the Administrative and Academic Affairs Committee; the Curriculum Committee; the Personnel Committee; the Faculty Affairs Committee; the Strategic Planning Committee; the Doctoral Program Committee; the Services Committee; and the Informatics Committee. The outcomes of their activities are reported at faculty meetings.

- b. the relationship between the school or program and other academic units within the institution. For programs, ensure that the chart depicts all other academic offerings housed in the same organizational unit as the program. Organizational charts may include committee structure organization and reporting lines.

FIGURE 12.b.1 Medical Sciences Campus Organizational Chart

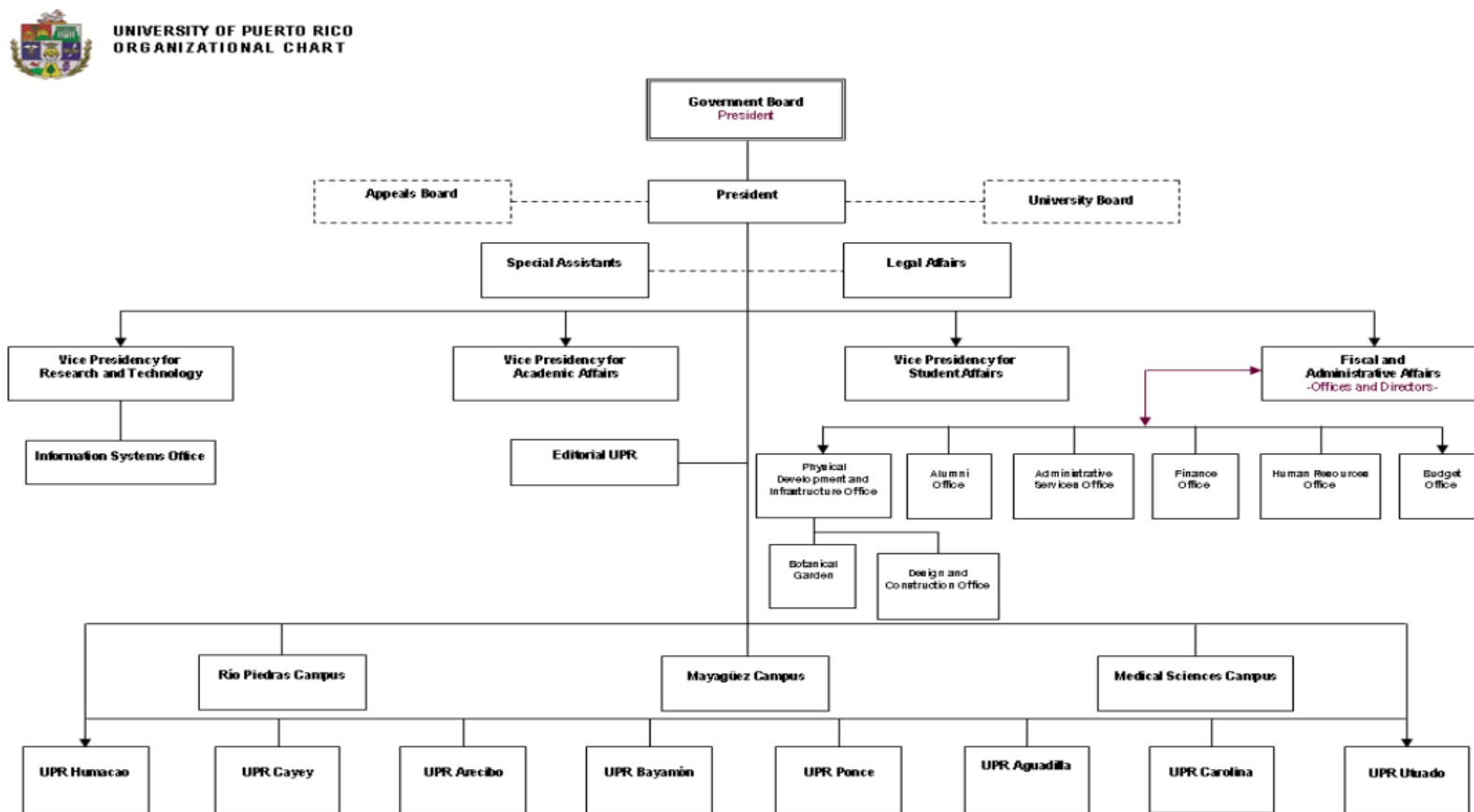


Aprobado por: Wanda T. Maldonado Dávila
 Wanda T. Maldonado Dávila, BS Pharm, Pharm.D.
 (Aproved by): Rectora Interina/ Interim Chancellor

Fecha: 17 DE MAYO DE 2021
 (Date)

- c. the lines of authority from the school or program's leader to the institution's chief executive officer (president, chancellor, etc.), including intermediate levels (eg, reporting to the president through the provost)

FIGURE I2.c.1 University of Puerto Rico Organizational Chart



2013

d. for multi-partner schools and programs (as defined in Criterion A2), organizational charts must depict all participating institutions.

NOT APPLICABLE

- 3) An instructional matrix presenting all the school or program's degree programs and concentrations including bachelor's, master's and doctoral degrees, as appropriate. Present data in the format of Template Intro-1.

TABLE I.3.a.1. Graduate School of Public Health Instructional Matrix - Degrees and Concentrations							
				Categorized as public health*	Campus based	Executive	Distance based
Bachelor's Degrees							
Concentration		Degree					
N/A		N/A		N/A		N/A	
Master's Degrees		Academic	Professional				
Concentration		Degree	Degree				
Biostatistics			MPH	x	MPH		
Epidemiology		MS	MPH	x	MS, MPH		
Environmental Health			MPH	x	MPH		
Health Services Administration			MHSA		MHSA		
Public Health Education			MPHE	x	MPHE		
General Option			MPH	x	MPH		
Gerontology			MPH	x	MPH		
Industrial Hygiene		MS			MS		

TABLE I.3.a.1. Graduate School of Public Health Instructional Matrix - Degrees and Concentrations							
				Categorized as public health*	Campus based	Executive	Distance based
Evaluation Research of Health Systems		MS			MS		
Nutrition		MHSN			MHSN		
Demography		MS			MS		
Doctoral Degrees		Academic	Professional				
<i>Concentration</i>		<i>Degree</i>	<i>Degree</i>				
Environmental Health			DrPH	x	DrPH		
Health Systems and Analysis			DrPH	x	DrPH		
Social Determinants of Health			DrPH	x	DrPH		
Joint Degrees (Dual, Combined, Concurrent, Accelerated Degrees)		Academic	Professional				
2nd Degree Area	Public Health Concentration						
<i>Degree area earned in conjunction</i>	<i>Existing or joint-specific</i>	<i>Degrees</i>	<i>Degrees</i>				
N/A		N/A		N/A		N/A	
N/A		N/A		N/A		N/A	

- 4) Enrollment data for all of the school or program's degree programs, including bachelor's, master's and doctoral degrees, in the format of Template Intro-2. Schools that house "other" degrees and concentrations (as defined in Criterion D19) should separate those degrees and concentrations from the public health degrees for reporting student enrollments. For example, if a school offers a BS in public health and a BS in exercise science, student enrollment data should be presented separately. Data on "other" degrees and concentrations may be grouped together as relevant to the school.

TABLE I.4.a.1. Graduate School of Public Health Enrollment Data AY 2021-2022		
Degree		Current Enrollment AY 2021-2022
Master's		
	MPH Degrees (All)	159
	MPH-Biostatistics	17
	MPH-General Option	47
	MPH-Epidemiology	24
	MPH-Environmental Health	20
	MPHE-Public Health Education	28
	MPH-Gerontology	23
	Academic public health master's Programs	
	MS-Epidemiology	13
	All remaining master's degrees (SPH)	
	MHSA-Health Services Administration	40
	MS-Nutrition	16
	MS-Evaluation Research of Health Systems	7
	MS-Demography	19
	MS-Industrial Hygiene	19
Doctoral		
	DrPH (ALL)	87
	DrPH-Environmental Health	17
	DrPH-Health Systems and Analysis	40
	DrPH-Social Determinants of Health	30
	Academic public health doctoral*	NA
	All remaining doctoral degrees (SPH)	NA
Bachelor's	N/A	N/A

A1. ORGANIZATION AND ADMINISTRATIVE PROCESSES

The school or program demonstrates effective administrative processes that are sufficient to affirm its ability to fulfill its mission and goals and to conform to the conditions for accreditation. The school or program establishes appropriate decision-making structures for all significant functions and designates appropriate committees or individuals for decision making and implementation. School or program faculty have formal opportunities for input in decisions affecting the following: degree requirements, curriculum design, student assessment policies and processes, admissions policies and/or decisions, faculty recruitment and promotion, and research and service activities. The school or program ensures that faculty (including full-time and part-time faculty) regularly interact with their colleagues and are engaged in ways that benefit the instructional program (eg, participating in instructional workshops, engaging in program- or school-specific curriculum development and oversight).

1) List the school or program's standing and significant ad hoc committees. For each, indicate the formula for membership (eg, two appointed faculty members from each concentration) and list the current members. (self-study document)

The Graduate School of Public Health (GSPH) establishes appropriate highly participatory decision-making structures to fulfill its mission and goals. The School has seven (7) standing committees. The standing committee composition and responsibilities are established in the GSPH by-laws. These committees are entrusted with electing a President and Secretary, maintaining minutes of all meetings, and submitting a written report at each of the bi-annual faculty meetings. Faculty members are elected in the May faculty meeting for a two-year term. Student members are elected following the by-laws adopted by the Student Council. For each standing committee, the membership formula and current members are presented for academic year 2020-2021.

Administrative and Academic Affairs Committee (CAD, for its Spanish acronym):

Composition: Dean, who acts as President, Associate Dean for Academic Affairs, Assistant Dean for Student Affairs, President of the Strategic Planning Committee, all Department Chairs, a representative from each of the five academic departments, three elected faculty representatives, and the President of the GSPH Student Council.

Responsibilities:

- Advise the Dean on academic and administrative policy.
- Review, approve, and monitor strategic plans.
- Evaluate all plans dealing with school facilities.
- Examine reports submitted by other standing committees and convey recommendations to the Dean.
- Design and revise criteria for student promotions and degree awards and submit them to School Faculty for approval.

Current members:

Dr. José Seguinot Barbosa	Chair and Acting Dean
Dr. Edgardo Ruiz Cora	Associate Dean for Academic Affairs
Prof. Elsa Marín López	Assistant Dean for Student Affairs
Dr. Roberto Ramírez García	Department Chair, Health Services Administration
Dr. Juan C. Reyes Pulliza	Department Chair, Biostatistics & Epidemiology
Dr. Hiram V. Arroyo Acevedo	Department Chair, Social Sciences
Dr. Ana M. Parrilla Rodríguez	Department Chair, Human Development
Dr. Luis A. Bonilla Soto	Department Chair, Environmental Health
Dr. Roberto Torres Zeno	Health Services Administration Faculty Representative
Dr. Linnette Rodríguez Figueroa	Biostatistics & Epidemiology Faculty Representative
Dr. Ana L. Dávila Román	Social Sciences Faculty Representative
Dr. Michael J. González Guzmán	Human Development Faculty Representative
Dr. Imar Mansilla Rivera	Environmental Health Faculty Representative
Dr. Luz E. León López	GSPH Elected Faculty representative
Dr. Marcilyn Colón Colón	GSPH Elected Faculty representative
Dr. Nirzka M. Labault Cabeza	GSPH Elected Faculty representative
Dr. Carol Salas Pagán	President of Strategic Planning Committee
Ms. Ambar Meléndez Pérez	President of GSPH Student Council 2020-2021
Mr. Juan Tejada Guzmán	GSPH Administrator

Curriculum Committee

Composition: Elected representative from each of the five Academic Departments, the Counselor from the Assistant Deanship for Student Affairs, a representative of the students and an alternate elected following the by-laws of the GSPH Student Council. The Associate Dean for Academic Affairs is an ex officio member. The Director of the Office for Curriculum and Evaluation is a permanent guest.

Responsibilities: Advise the Dean on all matters pertaining to the development and implementation of all curriculum revisions, official changes in course content as well as new program evaluations.

Current members:

Dr. Edgardo Ruiz Cora	Ex-Oficio, Associate Dean for Academic Affairs
Dr. Ivelisse M. García Meléndez	Director, Curriculum & Evaluation Office
Prof. Chenoa Blot Ochoa	Counselor, Office of Student Affairs
Dr. Marisol Peña Orellana	Health Services Administration Department
Dr. Rosa V. Rosario Rosado	Biostatistics & Epidemiology Department
Dr. María T. Borges Cancel	Social Sciences Department
Dr. Ana M. Parrilla Rodríguez	Human Development Department
Dr. Sergio A. Caporali Filho	Environmental Health Department
Ms. Génesis Alvelo Colón	Student Representative

Strategic Planning Committee (COPE, for its Spanish acronym)

Composition: Five (5) faculty members elected by the faculty using the following criteria: one researcher, one faculty member with at least 15 years of academic experience, one faculty member with less than five years of academic experience, one faculty member with experience and capability in public health and statistics, and one faculty member with an outstanding service trajectory. Other members include: the Associate Dean for Academic Affairs, a representative of the GSPH's staff, one student, one alumnus, and a GSPH former Dean. Staff and alumni representatives are appointed by the Dean.

Responsibilities:

- Advise Dean on academic and administrative strategic decisions and policy.
- Develop, Review, approve, and monitor strategic plans.
- Analyze the GSPH Annual Report in relation to the progress and achievement of the GSPH Strategic Plan.
- Keep the GSPH community informed of the strategic planning process and promote active participation in these activities.

Current members:

Dr. Edgardo Ruiz Cora	Associate Dean for Academic Affairs
Prof. Elsa I. Marín López	Assistant Dean for Student Affairs
Dr. Ivelisse García Meléndez	Former Associate Dean
Dr. Ana Parrilla Rodríguez	Faculty with 15 yrs. Academic experience
Dr. Roberto Torres Zeno	Faculty Expert in Public Health Practice
Dr. Carol Salas Pagán	Faculty with Outstanding record in service
Dr. José Carrión Baralt	Faculty with Outstanding record in research
Dr. Aluisio de Oliveira Pimenta	Junior Faculty with Less than 5 yrs in the GSPH
Ms. Xiomara Castillo Meléndez	School Staff Representative
Dr. Luis E. Estremera de Jesús	Alumni
Ms. Lancelotte Oliveras Vega	Student representative

School Personnel Committee

Composition: One faculty member from each of the five academic department's personnel committee and a minimum of three department chairs selected by the Dean. Academic department representatives are the Chair of the Department Personnel Committees. Department Personnel Committee members are elected from within the department faculty.

Responsibilities: Advise the Dean on all matters pertaining to new appointments, promotions, leaves, tenure, monetary compensation, and other personnel issues related to the faculty. Reviews of personnel issues is conducted in the school committee after receiving the report and recommendation from Department Personnel Committees which have as their responsibility conducting the first review in personnel decisions as advisors to department chairs.

Current Members:

Dr. Hiram V. Arroyo Acevedo	Department Chair
Dr. Luis A. Bonilla Soto	Department Chair
Dr. Juan C. Reyes Pulliza	Department Chair
Dr. Heriberto A. Marín Centeno	Faculty Member-Health Services Administration Department
Dr. Gilberto Ramos Valencia	Faculty Member-Biostatistics & Epidemiology Department
Prof. Daisy M. Gely Rodríguez	Faculty Member-Social Sciences Department
Dr. Michael González Guzmán	Faculty Member-Human Development Department
Dr. José A. Norat Ramírez	Faculty Member-Environmental Health Department

Faculty Affairs Committee

Composition: Seven full-time faculty members elected by the faculty.

Responsibilities:

- Identifying faculty needs.
- Advise the Dean in matters pertaining to appeals related to appointments, promotions, and issues related to academic load.

Current members:

Dr. Nirzka Labault-Cabeza, Chair	Human Development Department
Dr. Marcilyn Colón Colón	Social Sciences Department
Dr. Alusio Pimenta De Olivera	Environmental Health Department
Dr. Gilberto Ramos Valencia	Biostatistics and Epidemiology Department
Dr. María Borges Cancel	Social Sciences Department
Dr. Imar Mansilla Rivera	Environmental Health Department
Dr. José Pérez Díaz	Health Services Administration Department

Doctoral Program Committee

Composition: Associate Dean for Academic Affairs, who presides it; faculty representatives of each Academic Department; DrPH program coordinators; two representatives of faculty teaching DrPH core courses; and one doctoral student.

Responsibilities:

- Examine the academic quality and the multidisciplinary nature of the programs.
- Monitor all matters pertaining to the development and implementation of the curriculum.
- Design guidelines and procedures for student evaluations.
- Revise admission procedures and criteria.
- Assess the program's progress and impact.

Current members:

Dr. Edgardo Ruiz Cora, Chair	Associate Dean for Academic Affairs
Dr. Marta Bustillo Hernández	Social Sciences Department

Dr. Marinilda Rivera Díaz	Coordinator DrPH-Social Determinants of Health
Dr. José Seguinot Barbosa	Coordinator DrPH-Environmental Health
Dr. Juan C. Reyes Pulliza	Epidemiology and Biostatistics Department
Dr. Gilberto Ramos Valencia	Epidemiology and Biostatistics Department
Dr. Linnette Rodríguez Figueroa	Epidemiology and Biostatistics Department
Vacant	Human Development Department
Dr. Roberto Torres Zeno	Health Services Administration Department
Dr. Ruth E. Ríos Motta	Coordinator, DrPH-Health System Analysis
Ms. Laura Rivera Cabrera	Doctoral Student Representative

Informatics Committee

Composition: Associate Dean for Academic Affairs; one representative from each of the five departments; a representative of GSPH staff; and a student representative. Staff representative is appointed by the Dean and department representatives are selected within the departments.

Responsibilities:

- Advise the Dean on all institutional issues pertaining to Information Technology (IT).
- Collaborate in the development of proposals for the acquisition of equipment and advanced software programs.
- Identify the IT training needs of faculty, administrative personnel, staff, and students.
- Define and establish policies for the acquisition, placement, and utilization of IT equipment and infrastructure to better serve teaching, research, and service activities and priorities in the school.

Current members:

Dr. Edgardo Ruiz Cora	Associate Dean for Academic Affairs
Prof. Elsa Marín López	Student Affairs Office
Dr. Dharma Vázquez Torres	Health Services Administration Department
Dr. Istoni Da Luz Sant' Ana	Biostatistics & Epidemiology Department
Dr. Claudia Amaya Ardila	Alternate member, Biostatistics & Epidemiology Department
Dr. Hernando Mattei Torres	Social Sciences Department
Dr. Ana Parrilla Rodríguez	Human Development Department
Dr. Pablo Méndez Lázaro	Environmental Health Department
Mr. José M. Sobrino Delgado	Staff Representative, IT Support Staff
Ms. Gabriela López Toledo	Student Representative

Service Committee

Composition: One representative from each Academic Department; a representative from each of the GSPH service units; a student representative elected by the GSPH Student Council, a representative from the GSPH's staff; and a community representative. Staff and community representatives are appointed by the Dean.

Responsibilities:

- Advise the Dean on all matters pertaining to the provision of services to the community.
- Implement the service goals and objectives of the Strategic Plan.

- Promote and contribute to the effectiveness of the School's service policy to facilitate the coordination of teaching, research, and service.

Current members:

Dr. Marisol Peña Orellana, Chair	Center for Public Health Preparedness
Dr. José M. Pérez Díaz	Health Services Administration Department
Dr. Cruz M. Nazario Delgado	Biostatistics & Epidemiology Department
Dr. Marcilyn Colón Colón	Social Sciences Department
Dr. José Seguinot Barbosa	Environmental Health Department
Ms. Xiomara Castillo Meléndez	Continuing Education Division
Dr. Carol Salas Pagán	Institute for Developmental Disabilities
Dr. Hernando Mattei Torres	Census Data Center
Dr. Ramón Sánchez Rodríguez	Family Planning Program
Prof. Bethzaida Díaz, Altern	Family Planning Program
Ms. María Archevald Cansobre	Student Representative

Executive Committee

The GSPH has another committee which is not a Standing Committee as outlined in the School's by-laws, but represents the Dean's Staff. The Executive Committee is composed by all academic administration positions in the school, including: Dean, Associate Dean of Academic Affairs, Assistant Dean of Student Affairs, all five Department Chairs, and the GSPH Administrator. The Executive Committee meets each month and ensures the monitoring and implementation of policy, initiatives, and priorities across the different administrative units of the school. The Executive Committee also advises the Dean in budget issues that brings together the needs of each academic department.

Current Members:

Dr. José Seguinot Barbosa	Chair and Acting Dean
Dr. Edgardo Ruiz Cora	Associate Dean for Academic Affairs
Prof. Elsa Marín López	Assistant Dean for Student Affairs
Dr. Roberto Ramírez García	Department Chair, Health Services Administration
Dr. Juan C. Reyes Pulliza	Department Chair, Biostatistics & Epidemiology
Dr. Hiram V. Arroyo Acevedo	Department Chair, Social Sciences
Dr. Ana M. Parrilla Rodríguez	Department Chair, Human Development
Dr. Luis A. Bonilla Soto	Department Chair, Environmental Health
Mr. Juan Tejada Guzmán	GSPH Administrator

2) Briefly describe which committee(s) or other responsible parties make decisions on each of the following areas and how the decisions are made:

a. degree requirements

Degree requirements are defined by the Programs' faculty in the proposal that establishes the program, with the approval of the Curriculum Committee, the GSPH's Associate Dean of Academic Affairs, the GSPH faculty and the MSC's Dean for Academic Affairs. Any change in degree requirements

begins at the program and department level with the approval of its faculty. For degree requirements that affect only one academic program the department submits the proposed change for review to the Associate Dean of Academic Affairs's Office where the proposed changes are reviewed by the Curriculum and Evaluation Office. If the change is approved by the Associate Dean's Office, it is presented to the Administrative and Academic Affairs Committee (CAD) for reactions and potential recommendations before submission to the MSC Deanship of Academic Affairs for final approval and implementation.

For changes in degree requirements at the GSPH level (which involve more than one academic program) the Associate Dean's Office works with the faculty of the programs concerned to design and/or review proposed changes before submission to the CAD for review and approval. Once approved by the committee, the changes are brought before the GSPH faculty for final approval. Changes in degree requirements are then submitted to the MSC Deanship of Academic Affairs for review before implementation.

For DrPH programs the Doctoral Program Committee is charged with the assessment and review of doctoral degree requirements. The Doctoral Program Committee works closely with the Associate Dean of Academic Affairs in this process before submission for review in the CAD to continue the process.

Degree recommendations are submitted by the program coordinator to the department chairperson after a review of completion of all degree requirements. The department chairperson reviews the recommendations and submits these to the Assistant Dean for Student Affairs who reviews, evaluates, and recommends the award of the degree to the Dean. The Dean forwards the degree recommendations to the Office of the Registrar. Refer to Criteria H1 and H4 for more details on policies, practices, and outcomes regarding recruitment, admissions, and awarding of degrees.

b. curriculum design

The GSPH's Curriculum Committee establishes and monitors academic programs and establish standards and policies. The Office of the Associate Dean for Academic Affairs implements these standards and policies and provides administrative support to the Curriculum Committee. All policies and procedures must comply with established UPR System and MSC policies and procedures.

Academic curriculum design and revisions respond to accreditation agency requirements, the external environment and labor market, as well as other issues identified as part of the school's assessment processes. Curriculum design and revisions begin at the academic program level where the coordinator, along with the program's faculty, establish and justify any curriculum modification. The Curriculum and Evaluation Office within the Associate Dean of Academic Affairs's Office offers technical assistance and guidance in this process to ensure compliance with policies and curriculum design best practices. Once approved at department level it is submitted to the Associate Dean of Academic Affairs's Office for initial review. Once this initial review is completed, curriculum design and review issues are submitted to the Curriculum Committee for evaluation, recommendations, and approval. Once approved the Associate Dean for Academic Affairs submits a report to the MSCs Dean of Academic Affairs for review before submission to the Executive Vice President of Academic Affairs and Research for UPR System.

c. student assessment policies and processes

Student assessment policies are developed and/or reviewed by the Associate Dean of Academic Affairs Office and presented to the Administration and Academic Affairs Committee (CAD) for review and recommendations before implementation. Current student assessment policies in the GSPH are detailed in the Student Learning Assessment Plan (**Electronic Resource File A1.2.c.1**) and the Academic Advising and Student Academic Progress Monitoring Policy (**Electronic Resource File A1.2.c.2**). The Student Learning Assessment Plan was developed as part of the curriculum review conducted to comply with the CEPH 2016 accreditation criteria, and it outlines the process of assessment of student competency attainment. The system outlined in this plan was implemented in academic year 2019-2020 with the implementation of the new curriculum. The GSPH's Academic Advising and Student Academic Progress Monitoring Policy was developed recently and approved by the CAD on January 27th 2021. Its purpose is unifying student progress assessment and monitoring across all programs in the school. It was also developed to incorporate the Student Learning Assessment Plan in student monitoring and progress, and to provide a more proactive stance to identify and assist academically at-risk students.

Student competency assessment involves all levels of the GSPH. At the end of each term the faculty responsible for each course submits an evaluation of relevant competency attainment for each student in the course. These student competency evaluations are submitted to the Associate Dean of Academic Affairs Office where the information is integrated into competency assessment reports. Program competency assessment reports are submitted to program coordinators and department chairpersons for review and actions relative to the programs and courses under their responsibilities. A high-level student competency assessment report for the GSPH is generated for review and action for the Administration and Academic Affairs Committee. This system is new and is still undergoing review and adjustments. Its implementation was been hindered by COVID-19 restrictions. All academic administrative processes had to be adapted to virtual mechanisms, thereby affecting the implementation of the assessment system and its review. Student competency assessments were reported by faculty and the reports were generated but not within the time-frame outlined by the assessment plan. It is expected that compliance with competency assessment plan timelines will be met through the ongoing review process of the plan and collection system.

The GSPH Academic Advising and Student Academic Progress Monitoring Policy further detailed and reviewed procedures of student assessment and monitoring. Student assessment and monitoring occurs at the end of each trimester in which program coordinators identify at-risk students and refer to academic advising for action. This process allows for actions to be taken at the program and department level. The policy also establishes a meeting every trimester led by the Associate Dean of Academic Affairs, with all academic program coordinators and the Assistant Dean of Student Affairs, to identify issues in student progress and procedures, academic advising, and the implementation of the policy. Program coordinators in these meetings provide recommendations for action to be brought to the Dean and the CAD for review and final decision-making.

The GSPH also collects student assessment information through exit and alumni surveys and course evaluations. This information is a shared responsibility between the Associate Dean of Academic Affairs and Assistant Dean of Student Affairs Office. Reports with this information is brought to the CAD for review and decision-making.

d. admissions policies and/or decisions

The Administration and Academic Affairs Committee (CAD) is responsible for the initial review and approval of any changes to admission policy before being reviewed and approved by the faculty of

the school. For DrPH programs the Doctoral Program's Committee is charged with the assessment and review of doctoral admission requirements before submission for review in the CAD to continue the process. The Associate Dean of Academic Affairs is responsible for supervising compliance with school admission policies and the Assistant Dean of Student Affairs assists academic programs in the process of recruitment and monitoring of applications and program admission recommendations.

There is no centralized admissions committee at school level. Each program has guidelines for admission decisions (aligned with the GSPH Admission Policy), a process for applicant review, and a method for admission decision-making. The initial and final steps of the admission process - receiving the application forms and required documents and notifying final decisions - are centralized in the MSC Central Admissions Office. All applications are referred to the program coordinators through the Office for Student Affairs and department chairpersons. Program coordinators, in collaboration with program faculty are responsible for interviewing, assessing qualifications, and recommending candidates to be admitted. The Assistant Dean of Student Affairs Office reviews academic program admission recommendations to verify that the admission score calculated to recommend candidates is complete and consistent with the information received by the MSC Central Admissions Office. The admission recommendations from the programs are endorsed by the Dean and sent to the MSC Central Admissions Office for final review that all required official documentation is complete. All communications related to final decisions on admissions are signed by the Dean.

e. faculty recruitment and promotion

For tenure-track positions the recruitment process is initiated at the school level by the Dean or department chairperson, who publishes a job posting in appropriate local and national printed or electronic media. The department personnel committee receives and reviews documents from the interested candidates, conducts interviews, and prepares a report with recommendations to the department chairperson, based on the candidates' experience and credentials. The department chairperson reviews the committee's report and submits his/her recommendations to the Dean, who forwards all pertinent documents to the GSPH Personnel Committee for review. The committee verifies that the candidate is qualified for the available position and that the selection process has been fair and unbiased, and then submits its recommendations to the Dean. According to the UPR General Bylaws (**Electronic Resource File A1.2.e.1**), the department and school personnel committees only have an advisory role to the Dean, who may accept or reject their recommendations. The Dean recommends candidates for appointment to the MSC's Chancellor and Administrative Board, who have final authority over the appointment.

For non-tenure track positions and non-primary instructional faculty (such as adjunct professors), the process may have some initial variations. Academic programs identify faculty resources according to their academic needs and proceed to evaluate the qualifications of potential faculty resources to fill these needs. After selecting a candidate, the process is the same as that of tenure-track faculty in which candidates are evaluated by the personnel committees at the department and school level, which in turn submit the recommendations to department chairpersons and the Dean, respectively.

The following criteria are considered in the appointment of all academic faculty: 1) quality of the applicant's academic work, 2) degrees and other credentials, 3) areas of expertise, 4) teaching experience and application of knowledge in a particular area, 5) number and quality of peer-reviewed publications, 6) basic agreement with the philosophy and objectives of the university, and 7) ability to conduct scientific research or creative work. These criteria are analyzed based on the position or academic need for which the candidates are being considered.

Rules pertaining to promotion are stated in Article 47 of the UPR General Bylaws. The MSC grants the academic ranks of Instructor, assistant professor, associate professor, and professor, the equivalent levels for the ranks of researcher, as well as four levels (I-IV) for the ranks of counselor, social worker, and psychologist. According to Certification 133 (1999-2000) of the UPR Board of Trustees, faculty are considered for promotion after a specified number of years at each rank (assistant professor to associate professor is 3 years, and from associate professor to full professor is 5 years). Regulations guarantee a review process, not an automatic promotion. The UPR System's policies regarding tenure are stated in Article 46 of the UPR General Bylaws. In order to be considered for tenure, faculty must hold a full-time, tenure-track appointment and have served at least five consecutive years at the institution.

To maintain a full and ethical process of evaluation of faculty personnel, the Medical Sciences Campus (MSC), through Article 45, section 45.2, of UPR General Bylaws, establishes that the evaluations will be responsibilities of personnel committees at the academic department and faculty or school level, in accordance with the standards established by the institutional units and approved by the MSC Administrative Board, which must be consistent with these regulations.

The MSC Faculty Evaluation Instruction Manual (**Electronic Resource File A1.2.e.2**), describes the general process for the evaluation of faculty. At the beginning of each academic year, the department chairperson identifies and sends a list of faculty eligible to request promotion or tenure to the personnel committee of the department. Then the department chairperson sends a letter to identified faculty to ascertain their intention to request promotion or tenure. For faculty that will request promotion, the department chairperson will discuss and reach an agreement with the candidate (faculty member) about the relative percentages and weights of the areas to be evaluated based on the academic load and trajectory of the candidate in the years to be evaluated for promotion. Among the areas relevant to the GSPH's faculty that are weighted for evaluation are: general faculty responsibilities, research, teaching, special service, academic administration, and counseling. All faculty are evaluated in the general faculty responsibility area which has an equal weight of twenty per cent in all faculty evaluations. The percentage weight in other areas will depend on academic load and specific responsibilities of the position of the faculty being evaluated. The candidate must provide evidence and documentation for each area evaluated, so that the department personnel committee can conduct its evaluation using the required templates, and according to the distribution of the areas of academic load agreed to between the candidate for promotion and his/her department chairperson.

The promotion process goes through three review processes. The first process occurs in the department personnel committee which reviews and evaluates the documentation and evidence submitted by the candidate for promotion. The required documentation includes supervisor, peer, and student evaluations. The department personnel committees submit a report and recommendation to the department chairperson for review and recommendation to the Dean of the GSPH. The Dean submits the candidates' documents to the GSPH's Personnel Committee. Among other aspects, the GSPH Personnel Committee will establish an order of priorities for the promotion of each rank and will deliver a report to the Dean with recommendations that advise about the corresponding decisions. The Dean will prepare a report to the MSC Administrative Board and will send the supporting documents that include all the evaluations and evidence in the required templates. The MSC Administrative Board will evaluate each case and will make the final decision of recommending tenure or promotion in rank.

In the spirit of maintaining the highest standards of a merit evaluation system for faculty promotion procedures and evaluation criteria updates, the MSC Administrative Board has made recent updates to the guidelines for promotion and tenure. Examples of efforts made to update and enhance procedures are:

- Certification # 56, 2017-2018: Establishes the minimum criteria of weighted punctuation for the consideration of promotion in academic rank, established in the provisions of the UPR General Bylaws, Article 41 and 45.
- Certification #16, 2018-2019: Establishes the minimum score criterion weighted for the rank-up consideration for each rank set in the provisions of the UPR General Bylaws.
- Certification #18 2018-19: Proposes to extend the recommendations already approved by the Administrative Board of the Medical Sciences Campus in Certification #74, 2017-2018, which determines the tasks to be completed for academic rank promotions, review current faculty evaluation instruments, and determine if they are visible and measurable, according to eight specific criteria.

During the last few years, faculty members have expressed a valid concern regarding the impact of emergency fiscal policies established by the government and the UPR Board of Trustees (due to the Puerto Rico's ongoing recession) on the promotion process. The UPR Board of Trustees established (Certification # 75, 2017-18) a new institutional policy about the annual granting of promotions for teaching faculty of the University System, whose merits have been approved and accredited, in accordance with the applicable evaluation processes, and thus certified by the corresponding Chancellors. According to that, the MSC Administrative Board approved Certification # 74, 2017-2018: Institutional policy about the annual granting of promotions in the rank of the teaching staff of the Medical Sciences Campus.

Non-Primary Instructional Faculty (Adjunct Professors) are not eligible for tenure and his/her appointment have a duration of up to five years, with evaluations by the department and school personnel committees at the end of each term (Certification 091, 2015-16, MSC Administrative Board), prior to their contract renovation. Within this category there are no ranks. Instead, the contractual agreement (Certification 091, 2015-16, MSC Administrative Board) and the remuneration received are made according to the time dedicated to contracted duties, the complexity of the task, the academic preparation or experience that qualifies the faculty to be contracted, and market value of the type of experience and academic credentials needed (Certification 024, 1996-97, UPR Board of Trustees).

f. research and service activities

The GSPH adheres to all research-related policies, rules, and regulations established by the UPR Board of Trustees and the MSC Administrative Board (see Criteria E4). Faculty members are free to pursue their research and service interests and secure funding for those pursuits. Freedom of research is established in Article 2 of the UPR Law and Section 11.2 of the UPR General Bylaws, which states: "Research freedom consists in the right of each faculty member devoted to research work to conduct it free of restrictions that limit objectivity, intellectual honesty, or the search for truth." Faculty members are supported by their departments and the school in this process by approving protected time in the faculty member's academic load for these activities.

The Service Committee is tasked with advising on the school's service policy and the needs of funded service projects and the GSPH's service units. Recommendations from the Service Committee are brought to the Administrative and Academic Affairs Committee for decision-making and action.

3) A copy of the bylaws or other policy documents that determine the rights and obligations of administrators, faculty, and students in governance of the school or program. (electronic resource file)

See **Electronic Resource File A1.3.1** which contains the GSPH Bylaws.

4) Briefly describe how faculty contribute to decision-making activities in the broader institutional setting, including a sample of faculty memberships and/or leadership positions on committees external to the unit of accreditation. (self-study document)

The school has ample participation in the broader Medical Sciences Campus and University of Puerto Rico decision-making structure. GSPH faculty membership in university and school committees is mandated by university and GSPH bylaws and is an integral part of the faculty's academic load. The Dean, Associate Dean of Academic Affairs, Assistant Dean of Student Affairs and faculty representatives participate on several committees and deliberative bodies with decision-making responsibilities within the Medical Sciences Campus (MSC). One of the main bodies of decision-making is the MSC Academic Senate, where the Dean and four GSPH academic senators (4 faculty members elected by faculty and 1 student member elected by GSPH students) represent the school. The faculty members who participated on campus or university-wide committees or deliberative bodies for the academic year 2019-2020 were:

TABLE A1.4.a. GSPH participation in MSC and UPR Decision-making, AY 2019-2020

Medical Sciences Campus Academic Senate	Dr. José Seguinot Barbosa	Dean
	Dr. Edgardo Ruiz Cora	Associate Dean (Alternate)
	Dr. Gilberto Ramos Valencia	Biostatistics & Epidemiology
	Dr. Ana L. Dávila Román	Social Sciences
	Dr. Lida Orta Anés	Environmental Health
	Dr. Michael González	Human Development
Medical Sciences Campus Administrative Board	Dr. José Seguinot Barbosa	Dean
	Dr. Edgardo Ruiz Cora	Associate Dean (Alternate)
Institutional Planning and Development Committee	Dr. Edgardo Ruiz Cora	Associate Dean
Committee for Educational Integration and Planning	Dr. Edgardo Ruiz Cora	Associate Dean
Institutional Review Board	Dr. Sergio Caporali	Environmental Health
Committee on Developmental Disabilities	Dr. Carol Salas Pagán	Human Development
Biosafety Committee	Dr. Carlos Rodríguez Sierra	Environmental Health

Discipline Committee	Dr. Edgardo Ruiz Cora (appointed when Committee is activated by Chancellor)	Associate Dean
Institutional Safety Board	Dr. Lida Orta Anés	Environmental Health
2018-2019		
MSC Searching Committee for the Election of the UPR President, MSC Academic Senate	Dr. Nirzka Labault-Cabeza	Human Development
2017-2018		
MSC Consultation Committee for the Election of the MSC Chancellor, MSC Academic Senate	Dr. Nirzka Labault Cabeza	Human Development
2015-2016		
	Dr. Heriberto Marín Centeno	Health Services Administration
MSC Public Policy Committee	Dr. Roberto Ramírez García	Health Services Administration
	Dr. Nirzka Labault Cabeza	Human Development

5) Describe how full-time and part-time faculty regularly interact with their colleagues (self-study document) and provide documentation of recent interactions, which may include minutes, attendee lists, etc. (electronic resource file)

GSPH faculty interact regularly in the bi-annual faculty meeting in December and May. There are also other opportunities for interaction with colleagues in academic program and department meetings throughout the year. Faculty also participate in orientations and workshops offered in the GSPH and on campus for faculty development. Other extracurricular activities also provide opportunities for colleague interaction such as program, department, school, or campus coordinated talks, webinars, presentation, and networking activities. Many of these extracurricular activities bring together faculty members of the school, faculty from across the MSC, public health practitioners and community-based organization representatives.

The participation of part-time faculty in different activities varies depending on their level of integration in teaching, research and service activities and the time dedicated to these tasks. Some part-time faculty work full-time in public health practice outside the school and teach evening courses, so their interaction with colleagues from the school may be limited. However, all part-time faculty are invited to participate in various activities which provide opportunities for interactions with colleagues. Some part-time faculty participate in program meetings and course and curriculum reviews along with full-time faculty. Part-time faculty are also invited and participate in orientations and workshops offered in the GSPH for faculty development. Part-time faculty in research and service projects interact regularly with full-time faculty in project meetings and activities. Lastly, part-time faculty are invited to participate in all School organized extracurricular activities which are widely disseminated across the school. Documentation for interaction can be found in **Electronic Resource File A1.5**.

6) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The GSPH benefits from a clear University organic law, and bylaws that govern the UPR System and guarantee participation of faculty and students at all levels of decision-making.
- The UPR governance structure facilitates the integration and collaboration of faculty and students in developing and evaluating academic policies and programs.

Weaknesses

- Participation of part-time faculty in governance and interaction with colleagues is not well documented and differs among GSPH programs. Despite this, the GSPH has been able to retain the collaboration of part-time faculty committed to its teaching mission but at the expense of limited involvement in other academic and governance activities that would assure their input in important decisions related to program design and implementation.
- Budget reductions faced by UPR have impacted organization and administrative processes. These budgetary cuts have triggered a recruitment freeze, what in turn have been a barrier for the establishment of a faculty succession plan, as well as potential participation in governance bodies such as Academic Senate and standing academic committees that contain tenure criteria.
- Despite de fact that the University of Puerto Rico's By-laws guarantees participation of faculty and student in decision making processes, this participation have been challenged since 2017 by the establishment of the Financial Oversight and Management Board for Puerto Rico, implemented in 2017 under the Puerto Rico Oversight, Management and Economic Stability Act of 2016 (PROMESA)

Lessons Learned

- The GSPH recognizes and values the contribution of part-time faculty in the academic and governance processes. It has identified the need for integration initiatives and a more systematic documentation of part-time faculty participation in the school.

A2. MULTI-PARTNER SCHOOLS AND PROGRAMS

When a school or program is sponsored by more than one regionally-accredited institution and is operated as a single organizational unit, the school or program defines a clear and comprehensive set of organizational rights and responsibilities that address operational, curricular and resource issues. Memoranda of agreement or other similar documents outline all such rights and responsibilities. The school or program has a single identified leader (dean or director) and a cohesive chain of authority for all decision making relevant to the educational program that culminates with this individual.

NOT APPLICABLE

A3. STUDENT ENGAGEMENT

Students have formal methods to participate in policy making and decision making within the school or program, and the school or program engages students as members on decision-making bodies whenever appropriate.

- 1) **Describe student participation in policy making and decision making at the school or program level, including identification of all student members of school or program committees over the last three years, and student organizations involved in school or program governance, if relevant to this criterion. Schools should focus this discussion on students in public health degree programs. (self-study document)**

The main mechanism for student participation in university, campus and school governance is through officially recognized student councils. The General Student Council for the Medical Sciences Campus has student representatives for each of the six schools with GSPH student representation. At the school level, the GSPH Student Council has student representatives of all sectors and levels within the school's academic programs. The GSPH Student Council is the vehicle for representation in the General Student Council for the MSC. It is also responsible for the designation of student representatives to six of the GSPH's eight standing committees (see Criterion A1). The campus and school level student councils also serve as the vehicle for student representation in all levels of decision-making including the MSC Academic Senate and Administrative Board, and the University Board and UPR Board of Trustees. Student concerns are also addressed through student liaison committees, and assessment committees at school and campus level. Student participation at the different organizational levels is established in the UPR Student Bylaws (**Electronic Resource File A3.1.1**), and MSC Student Bylaws (**Electronic Resource File A3.1.2**).

Student input is also taken into consideration in: faculty evaluations for promotion, curricular evaluations, and program evaluations. The MSC Institutional Assessment Committee also takes into consideration student input through evaluations of different areas of interest, course and faculty evaluations, and the evaluation of student life. There are student liaison committees at the GSPH level that meet regularly with the Assistant Dean for Student Affairs and work on issues affecting student life and performance. Students also actively participate in the accreditation processes. Student membership on GSPH committees for the past three years is shown on **TABLE A3.1.a**.

TABLE A3.1.a .Graduate School of Public Health Student Representatives in Standing Committees AY 2017-2018 to 2020-2021				
Standing Committees	AY 2017-2018	AY 2018-2019	AY 2019-2020	AY 2020-2021
Administrative and Academic Affairs Committee CAD	Héctor R. Ortiz Arroyo	Margarita Umpierre Valdejuli	Margarita Umpierre Valdejuli	Víctor Serrano / Ambar Melendez
Curriculum Committee	Brenda Rivera	Nancy R Cardona Cordero/ Waila Castro	Glizette Arroyo Morales	Génesis M. Alvelo Colón

TABLE A3.1.a .Graduate School of Public Health Student Representatives in Standing Committees AY 2017-2018 to 2020-2021				
Standing Committees	AY 2017-2018	AY 2018-2019	AY 2019-2020	AY 2020-2021
Strategic Planning Committee	Brenda Rivera	Jorge L. Rivera Velázquez	Héctor Quiñones Rosaly	Lanselotte J. Oliveras Vega
Doctoral Program Committee	Rosana D. Durán Boada	Rosana D. Durán Boada	Rosana D. Durán Boada	Laura T. Cabrera Rivera
Informatics Committee	Brenda Rivera	Brenda Rivera	Ramón Torres	Gabriela López Toledo
Service Committee	Brenda Rivera	Brenda Rivera	Juan J. De Jesús Oquendo	María D. Archevald Cansobre

2) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The GSPH benefits from a clear University organic law, and student bylaws that govern the UPR system and guarantee participation of faculty and students at all levels of decision-making.
- Students have demonstrated a high level of participation in the school's governance through representation in standing committees and at all levels of the UPR System.

Weaknesses

- Evening program students' level of participation, which includes doctoral students, is low compared to day program students. This is in large part due to evening program students having full-time employment outside the school.

Lessons Learned

- GSPH needs to identify strategies to increase evening and doctoral program student participation in decision-making bodies.
- It is important to evaluate the virtual experience during the COVID-19 pandemic as an alternative of incorporating evening program student participation in decision-making bodies

A4. AUTONOMY FOR SCHOOLS OF PUBLIC HEALTH

A school of public health operates at the highest level of organizational status and independence available within the university context. If there are other professional schools in the same university (eg, medicine, nursing, law, etc.), the school of public health shall have the same 5 degree of independence accorded to those professional schools. Independence and status are viewed within the context of institutional policies, procedures, and practices.

1) Briefly describe the school's reporting lines up to the institution's chief executive officer. The response may refer to the organizational chart provided in the introduction. (self-study document)

The School enjoys the same level of autonomy as other campus schools. The Dean reports directly to the Campus Chancellor, who reports to the University President. In the Introduction, **Figure Intro 2.c.1** presents the UPR System organizational chart. **Figure Intro 2.b.1** illustrates the UPR MSC organizational chart. (Refer to Introduction Number 2, figure c).

There are six basic levels of decision-making in the UPR System, i.e., department, school, campus, presidency, University Board, and Board of Trustees, with several bodies intervening at each level depending on the issue at hand.

The Central Administration - The three main bodies are the Presidency along with Vice Presidents, the University Board, and the Board of Trustees. The Presidency is responsible for the management and operations of all the 11 campuses that make up the UPR System. The Board of Trustees of the University of Puerto Rico is composed of 13 members representing various sectors of Puerto Rican society, including members of the university community. Their task is to oversee the overall operation of the institution and university system. The Board of Trustees also creates, reviews, and approve guidelines governing the development of the university and the university budget. Once assigned, campus officials have authority as to how discretionary funds are spent. The Board of Trustees also decide on the UPR system vision, strategic planning, tuition, employee salaries and benefits, academic distinctions, and amendments to the UPR General Bylaws, among other issues. The UPR University Board, in which all campus chancellors participate, advises the President regarding the coordination of system processes, including academic, administrative, and financial aspects.

Campus level - The two main bodies are the Academic Senate and the Administrative Board. The Administrative Board is responsible for advising the Chancellor in the exercise of his/her functions, oversee projects and development plans of the institutional unit, consider tenure and promotions of campus faculty, and the budget. The MSC Academic Senate approves the creation of new academic programs and major revisions of existing ones. Upon approval by the MSC Academic Senate, new program proposals are submitted to the MSC Administrative Board and to the UPR University Board for approval. Upon approval by the UPR University Board, the proposals are then submitted to the UPR Board of Trustees for final consideration and approval. New programs or substantial revisions of existing programs must also be licensed to operate by the Puerto Rico Council on Education. The MSC Academic Senate also examines and makes recommendations pertaining to major faculty and student issues and policies.

School level - The GSPH is assigned a portion of the UPR-MSC budget. The Dean and school administration have autonomy as to the use of its resources once funds are allocated. The GSPH uses

supplementary funds to meet operational expenses. Personnel actions such as promotions in rank, tenure, sabbaticals, and leaves of absence are reviewed at the school level prior to submitting them to the MSC Administrative Board for final approval. Once the Board of Trustees assigns the MSC Budget, campus officials have authority as to how discretionary funds are spent. GSPH matters are normally addressed by the Dean, department chairpersons, and the various standing committees (personnel, curriculum, and administration, among others). In general, the campuses and schools have considerable autonomy in academic matters of curriculum design and academic requirements and policies. Although there is a review process of academic decisions and processes at the campus and UPR system level, schools have a high degree of decision-making authority in these issues. Campus and schools have reasonable autonomy in administrative matters that remain within the assigned budgets. Factors external to the school, at the campus, UPR System, and government appropriations, guide budgetary decisions. The GSPH participate in the decision-making process through budget requests and justifications and once funds are assigned to the school there is considerable flexibility in formulating budget priorities. The GSPH enjoys the same prerogatives as other schools in the system to participate in academic program development and decisions, resource allocation, personnel recruitment, and budgeting distribution.

2) Describe the reporting lines and levels of autonomy of other professional schools located in the same institution and identify any differences between the school of public health's reporting lines/level of autonomy and those of other units. (self-study document)

There is no difference in reporting lines across all schools (including the GSPH) in the Medical Science Campus. The description above covers the levels of autonomy and reporting lines.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- Despite the changes experienced at the higher levels of the UPR, the GSPH has been able to maintain a stable leadership and the expected degree of autonomy.

Weaknesses

- Due to the Puerto Rico Fiscal Control Board, the level of autonomy of the GSPH has been impacted by restrictions on recruitment and promotion, particularly in budget formulation and financial decisions.

Lessons Learned

A5. DEGREE OFFERINGS IN SCHOOLS OF PUBLIC HEALTH

A school of public health offers a professional public health master's degree (eg, MPH) in at least three distinct concentrations (as defined by competencies in Criterion D4) and public health doctoral degree programs (academic or professional) in at least two concentrations (as defined by competencies in Criterion D4). A school may offer more degrees or concentrations at either degree level.

- 1) Affirm that the school offers professional public health master's degree concentrations in at least three areas and public health doctoral degree programs of study in at least two areas. Template Intro-1 may be referenced for this purpose. (self-study document)**

The GSPH offers six professional public Health master's degrees and three public health doctoral degree programs.

The master's level public health program concentrations:

- Master in Public Health – General Option
- Master's in Public Health with Specialty in Epidemiology
- Master's in Public Health with Specialty in Biostatistics
- Master's in Public Health with Specialty in Environmental Health
- Master's in Public Health with Specialty in Gerontology
- Master's in Public Health with Specialty in Public Health Education

The public health doctoral program concentrations offered at the School are:

- Doctor in Public Health with Specialty in Health System Analysis and Management
- Doctor in Public Health with Specialty in Environmental Health
- Doctor in Public Health with Specialty in Social Determinants of Health

- 2) An official catalog or bulletin that lists the degrees offered by the school. (electronic resource file or hyperlink in self-study document)**

The Official Catalog can be found in https://rcm2.rcm.upr.edu/wp-content/uploads/2021/04/UPR-MS-CATALOG-2021-2024-Rev-March_12_2021.pdf

B1. GUIDING STATEMENTS

The school or program defines a vision that describes how the community/world will be different if the school or program achieves its aims. The school or program defines a mission statement that identifies what the school or program will accomplish operationally in its instructional, community engagement and scholarly activities. The mission may also define the school or program's setting or community and priority population(s). The school or program defines goals that describe strategies to accomplish the defined mission. The school or program defines a statement of values that informs stakeholders about its core principles, beliefs, and priorities. Together, the school or program's guiding statements must address instruction, scholarship, and service and: (1) must define the ways in which the school or program plans to advance the field of public health and promote student success; (2) may derive from the purposes of the parent institution but also reflect the school or program's own aspirations and respond to the needs of the school or program's intended service area(s); (3) are sufficiently specific to allow the school or program to rationally allocate resources and to guide evaluation of outcomes.

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- 1) A one- to three-page document that, at a minimum, presents the school or program's vision, mission, goals, and values. This document may take the form of the executive summary of a strategic plan, or it may take other forms that are appropriate to support the school or program's ongoing efforts to advance public health and student success. (self-study document)**

The Faculty of Biosocial Sciences and Graduate School of Public Health (GSPH) of the University of Puerto Rico (UPR) has a clear and concise mission statement that was developed through a participatory process that included faculty, students, staff, alumni, and community partners in AY 2016-2017. As a result, the school revised its mission and vision. Both are aligned with the mission and vision statements of the University of Puerto Rico Medical Sciences Campus (MSC) and the UPR System.

GSPH Vision: *Be the leading institution in public health for the development and integral well-being of the population at the community, national and international levels.*

GSPH Mission: *Advance public health through the development of leaders, the creation of new knowledge and the offering of services that contribute to the sustainable well-being of society.*

GSPH Goals:

Goal 1: Education: Increase the quantity and quality of professionals in the diverse areas of public health disciplines through an accessible, competency-based curricular academic offering that promotes student success and is anchored in community needs.

Goal 2: Research: Create knowledge through public health initiatives that meet the needs of the population.

Goal 3: Service: Strengthen the active participation of the GSPH community in matters of public policy and health advocacy, and the development of public health services models, from an ecological and sustainable development perspective.

Goal 4: Management: Strengthen the human, fiscal, physical, and technological resources of the GSPH.

GSPH Values:

GSPH is guided by universal human values of Social Justice and Equity. Its commitment is with the following core values identified through the strategic planning process:

- Recognition of health, as an inalienable right of every human being.
- Respect for the dignity, diversity, and integrity of the human being.
- Solidarity with and sensitivity towards vulnerable populations.
- Responsibility, honesty, and professionalism in our academic work.
- Interdisciplinary and interprofessional teamwork.
- Continuous and responsible improvement.
- Commitment with socio-cultural values of the Puerto Rican nation.

The GSPH's first goal is centered on promoting student success through education objectives, measures and priorities related to instruction and teaching. These objectives are centered on the quality of academic offerings and support activities that promote student success. The second and third goals in research and service are centered on advancing the field of public health. It is important to note that they also contain objectives related to student success in providing opportunities in research and service that better prepare students for successful integration into the public health workforce. The GSPH's fourth goal is aimed at strengthening the resources and operational support that sustains the other goals and the school's mission. The GSPH's defined measures for its mission are presented in **TABLE B5.1.a**. The measures are aligned with both advancing the field of public health and promoting student success.

2) If applicable, a school- or program-specific strategic plan or other comparable document. (electronic resource file)

At the GSPH the strategic planning process is led by the Committee for Strategic Planning (COPE, for its Spanish acronym), which oversaw the development and assessment of the GSPH Strategic Plan 2017-2022. The Administrative and Academic Affairs Committee (CAD, for its Spanish acronym) and the school's academic administrators are responsible for the implementation and monitoring of the actions recommended in the plan.

In the strategic planning process, COPE held a series of meetings to review the previous strategic plan and develop new goals and objectives for the new plan. These meetings included students, faculty, staff, alumni, and community members. Following the COPE meetings, a one-day workshop was held to bring together students, faculty, staff, alumni, community partners, and members of COPE and CAD. This workshop was led by the COPE chair with experience in strategic planning. Workshop results were presented in CAD-COPE meetings to analyze identified priorities. The plan draft was presented to faculty for review in a series of workshops before its approval on June 2, 2017. The Strategic Plan is monitored on an ongoing basis and its progress is also reported and discussed in

regular faculty meetings held at the end of each semester. The GSPH Strategic Plan is available in **Electronic Resource File B1.2.**

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The GSPH has clear and concise mission, vision, goals, and values that guide all facets of its work.
- The GSPH and the MSC have a widely participatory process that provides opportunities for all stakeholders to provide input in the revision of the mission, and the development of goals, and objectives.
- Despite significant external challenges the GSPH has been able to implement plans for the accomplishment of its priorities, as outlined in the GSPH Strategic Plan 2017-2022.

Weaknesses

- External environmental factors, such as natural disasters and socio-economic conditions, have posed significant challenges in meeting strategic plan objectives. Of the four years that have transpired in the five year strategic plan, one was severely affected by Hurricane María, a second was affected by a series of earthquakes that brought down the whole power grid of Puerto Rico and saw the beginning of covid in-person instruction restrictions, and a third that was conducted through online instruction because of the ongoing covid pandemic. In addition, the GSPH as well as the UPR in general, is currently facing an economic crisis from reduced government funding resulting in budget reductions and faculty hiring freezes that have impacted strategic plan implementation.

Lessons Learned

- Strategic plans need to be flexible in order to allow for adjustments to unforeseen external events. Therefore, the strategic planning process needs to be subject to periodic revision.

B2. GRADUATION RATES

The school or program collects and analyzes graduation rate data for each public health degree offered (eg, BS, MPH, MS, PhD, DrPH). The school or program achieves graduation rates of 70% or greater for bachelor's and master's degrees and 60% or greater for doctoral degrees.

1) Graduation rate data for each public health degree. See Template B2-1. (self-study document)

The GSPH offers eight public health degree programs, MPH, MPHE, DrPH and MS. The school monitors graduation rates as an outcome measure. Since the last accreditation, the GSPH adopted a series of strategies to improve its graduation rates. All master's degrees must be completed in no more than five years, and all doctoral programs within eight years. **Table B2.1.a** and **B2.1.b** presents detailed information on students' graduation rates for each master's in public health program and master in science in epidemiology, respectively. Students' graduation rates by public health doctoral programs are presented in **Table B2.1.c**.

Table B2.1.a Master in Public Health Degree Graduation Rates						
Students in Master of Public Health, by Cohorts Entering Between AY 2016-2017 and 2020-2021						
	Cohort of Students	2016-2017	2017-2018	2018-2018	2018-2019	2020-2021
2016-2017	# Students continuing at beginning of this school year (or # entering for newest cohort)	109				
	# Students withdrew, dropped, etc.	4				
	# Students graduated	38				
	Cumulative graduation rate	35%				
2017-2018	# Students continuing at beginning of this school year (or # entering for newest cohort)	63	125			
	# Students withdrew, dropped, etc.	7	4			
	# Students graduated	37	37			
	Cumulative graduation rate	69%	30%			
2018-2019	# Students continuing at beginning of this school year (or # entering for newest cohort)	22	83	89		
	# Students withdrew, dropped, etc.	4	6	2		
	# Students graduated	14	51	28		
	Cumulative graduation rate	82%	70%	31%		
2019-2020	# Students continuing at beginning of this school year (or # entering for newest cohort)	8	28	59	98	

Table B2.1.a Master in Public Health Degree Graduation Rates						
Students in Master of Public Health, by Cohorts Entering Between AY 2016-2017 and 2020-2021						
	Cohort of Students	2016- 2017	2017- 2018	2018- 2018	2018- 2019	2020- 2021
	# Students withdrew, dropped, etc.	1	1	1	5	
	# Students graduated	6	23	37	52	
	Cumulative graduation rate	87%	89%	73%	53%	
2020-2021	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	6	21	41	78
	# Students withdrew, dropped, etc.	2	0	1	2	3
	# Students graduated	1	3	9	12	0
	Cumulative graduation rate	88%	91%	83%	65%	0%

TABLE B2.1.b. Academic Public Health Degree Graduation Rates						
Students in Master in Science with specialty in Epidemiology and Industrial Hygiene by Cohorts Entering Between AY 2016-2017 and 2020-2021						
	Cohort of Students	2016- 2017	2017- 2018	2018- 2019	2019- 2020	2020- 2021
2016- 2017	# Students continuing at beginning of this school year (or # entering for newest cohort)	19				
	# Students withdrew, dropped, etc.	0				
	# Students graduated	0				
	Cumulative graduation rate	0%				
2017- 2018	# Students continuing at beginning of this school year (or # entering for newest cohort)	19	20			
	# Students withdrew, dropped, etc.	1	0			
	# Students graduated	9	0			
	Cumulative graduation rate	47%	0%			
2018- 2019	# Students continuing at beginning of this school year (or # entering for newest cohort)	7	20	17		
	# Students withdrew, dropped, etc.	3	0	1		
	# Students graduated	5	11	0		
	Cumulative graduation rate	74%	55%	0%		
2019- 2020	# Students continuing at beginning of this school year (or # entering for newest cohort)	2	8	16	21	

2020-2021	# Students withdrew, dropped, etc.	0	3	1	3	
	# Students graduated	2	4	9	0	
	Cumulative graduation rate	84%	75%	53%	0%	
	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	1	6	20	20
	# Students withdrew, dropped, etc.	0	2	1	0	0
2020-2021	# Students graduated	0	0	2	1	0
	Cumulative graduation rate	84%	75%	65%	5%	0%

TABLE B2.1.c. Doctor in Public Health Graduation Rates									
	Cohort of Students	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
2013-2014	# Students entered	6							
	# Students withdrew, dropped, etc.	1							
	# Students graduated	0							
	Cumulative graduation rate	0%							
2014-2015	# Students continuing at beginning of this school year (or # entering for newest cohort)	5	11						
	# Students withdrew, dropped, etc.	0	1						
	# Students graduated	0	0						
	Cumulative graduation rate	0%	0%						
2015-2016	# Students continuing at beginning of this school year (or # entering for newest cohort)	5	10	8					
	# Students withdrew, dropped, etc.	0	0	1					
	# Students graduated	0	0	0					
	Cumulative graduation rate	0%	0%	0%					
2016-2017	# Students continuing at beginning of this school year (or # entering for newest cohort)	5	10	7	12				
	# Students withdrew, dropped, etc.	0	1	1	1				
	# Students graduated	1	0	0	0				

TABLE B2.1.c. Doctor in Public Health Graduation Rates									
	Cohort of Students	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
	Cumulative graduation rate	17%	0%	0%	0%				
2017-2018	# Students continuing at beginning of this school year (or # entering for newest cohort)	4	10	7	11	11			
	# Students withdrew, dropped, etc.	0	0	0	0	0			
	# Students graduated	1	2	0	0	0			
	Cumulative graduation rate	33%	18%	0%	0%	0%			
2018-2019	# Students continuing at beginning of this school year (or # entering for newest cohort)	3	8	7	11	11	21		
	# Students withdrew, dropped, etc.	2	0	1	0	1	0		
	# Students graduated	1	3	3	0	0	0		
	Cumulative graduation rate	50%	45%	38%	0%	0%	0%		
2019-2020	# Students continuing at beginning of this school year (or # entering for newest cohort)	1	5	2	11	9	21	10	
	# Students withdrew, dropped, etc.	1	0	2	2	1	1	0	
	# Students graduated	0	1	0	2	1	0	0	
	Cumulative graduation rate	50%	55%	38%	17%	9%	0%	0%	
2020-2021	# Students continuing at beginning of this school year (or # entering for newest cohort)	0	4	3	9	8	21	10	19
	# Students withdrew, dropped, etc.	0	2	0	0	0	1	0	2
	# Students graduated	0	0	0	0	1	0	0	0
	Cumulative graduation rate	50%	55%	38%	17%	18%	0%	0%	0%

2) Data on public health doctoral student progression in the format of Template B2-2. (self-study document)

TABLE B2.2.a Doctoral Student Data for Academic Year 2021-2022			
Doctoral Student Data	DrPH-Health System Analysis and Management	DrPH-Social Determinants of Health	DrPH-Environmental Health
# newly admitted in 2020-21	9	3	0
# currently enrolled (total) in 2020-21	29	27	17
# completed coursework during 2019-20	7	4	5
# in candidacy status (cumulative) during 2019-2020	17	9	13
# graduated in 2019-20	2	1	1

3) Explain the data presented above, including identification of factors contributing to any rates that do not meet this criterion's expectations and plans to address these factors. (self-study document)

Master in Public Health programs exceeded the minimum graduation rates. More than 70% of MPH students have graduated on or before the minimum time required. Attrition for MPH programs has been low, so ongoing cohorts are also expected to achieve greater than 70% graduation rates. Master in Science In Epidemiology is achieving greater than 80% graduation rates. Average attrition from the 2016-17 to 2018-19 cohorts is 23.8%. This is mostly due to small cohort sizes which impact attrition rates dramatically for every student that does not continue in the program.

Doctor in Public Health programs are achieving graduation rates that hover around 50% and do not meet the criterion's expectations. The GSPH has identified this as one of the school's most important challenges and priorities and has been actively evaluating and taking actions to address this situation. Doctoral program cohorts are small and any student that withdraws has a large impact on graduation rates. Given doctoral students' excellent performance in their courses and comprehensive exams, difficulties in graduation rates stem from the thesis requirements that are more aligned with a PhD than with a DrPH. The GSPH's doctoral student profile is composed mainly of professionals with full-time employment outside the school and this makes managing time commitments a challenge, especially during the culminating experience. For the cohorts reported, thesis requirements were not aligned with the school's full-time employed doctoral student profile and instead was more in line with requirements of a full-time PhD student. Appropriate alternatives to the thesis have been implemented and are currently being re-evaluated. A plan was developed to increase graduation rates and to continuously monitor students' academic progress. Based on monitoring data, priority areas were established to contribute to doctoral student success and improve graduation rates. The actions that are being implemented at the school, department and program levels to improve DrPH graduation rates are the following:

- Follow-up on graduation rates by programs and actions taken to improve these are being considered a high priority and have been incorporated into the meeting agendas of the GSPH Executive Committee and its Administration and Academic Affairs Committee. Every

trimester DrPH Program Coordinators and the Associate Dean of Academic Affairs meet to monitor progress.

- Certified letters were sent to students with updated information on their academic progress (status) with a projected timetable to complete their degree in the maximum time allowed.
- Colloquiums were held between students and faculty for the purpose of discussing potential research topics; availability and value of using secondary data banks; as well as for faculty to offer recommendations and suggestions to students regarding their thesis or dissertation research.
- Meetings were held every trimester between students and their program coordinators and/or research committee chairs to monitor the status of their work and strengthen faculty support for the development of student's research project.
- Each program applied benchmarks for the uniform analysis of student degree completion time extension applications, considering the reasons for extension requests and the student's academic performance. Requests for these extensions of time were approved based on the student's progress on their research during the trimester. As part of this process criteria were defined to determine trimester academic progress in courses related to the student's research project.
- The publication of articles in peer-reviewed journals were adopted as an alternative to a traditional research thesis.
- Dissertation manuals were revised to provide student more structured guidance, and the recent student advising policy approved by the school provides uniform guidelines for student monitoring, advising and dissertation follow-up.

The GSPH's actions to address DrPH program's graduation rates have the most impact in new doctoral student cohorts so the impact in graduation rates takes time to be reflected in the graduation rate outcome. DrPH programs are hard at work in achieving the desired outcomes in the shortest amount of time.

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The school achieves expected outcomes in graduation rates in its MPH and MS public health degrees, exceeding the criteria requirement.

Weaknesses

- DrPH programs do not meet the graduation rate criteria despite the efforts and initiatives developed to assist and encourage students to complete all requirements before the maximum time to completion.

Lessons Learned

- Strategies have been enacted for the past few years to monitor and improve DrPH graduation rates. School must continuously monitor and evaluate these actions' implementation.
- Given doctoral students' excellent performance in their courses and comprehensive exams, the difficulties in graduation rates stems from the thesis requirements that are more aligned with a PhD than with DrPH. Appropriate alternatives to the thesis are currently being evaluated.

B3. POST-GRADUATION OUTCOMES

The school or program collects and analyzes data on graduates' employment or enrollment in further education post-graduation, for each public health degree offered (eg, BS, MPH, MS, PhD, DrPH). The school or program chooses methods that are explicitly designed to minimize the number of students with unknown outcomes. This expectation includes collecting data that accurately presents outcomes for graduates within approximately one year of graduation, since collecting data shortly before or at the exact time of graduation will result in underreporting of employment outcomes for individuals who begin their career search at graduation. In many cases, these methods will require multiple data collection points. The school or program need not rely solely on self-report or survey data and should use all possible methods for collecting outcome data. The school or program achieves rates of 80% or greater employment or enrollment in further education within the defined time period for each degree.

- 1) Data on post-graduation outcomes (employment or enrollment in further education) for each public health degree. See Template B3-1. (self-study document)

TABLE B3.1.a Graduate School of Public Health Post Graduation Outcomes, AY 2016-2017 to 2018-2019				
Post-Graduation Outcomes	AY 2016-2017 Number and percentage	AY 2017-2018 Number and percentage	AY 2018-2019 Number and percentage	AY 2019-2020 Number and percentage ³
MPH				
Employed	42 (87.5%) ¹	77 (80.2%)	112 (79.4%)	44 (83.0%)
Continuing education/training (not employed)	3 (6.25%)	17 (17.7%)	17 (12.05%)	7 (13.2%)
Not seeking employment or not seeking additional education by choice	0	0	1 (0.7%)	2 (3.8%)
Actively seeking employment or enrollment in further education	3 (6.25%)	2 (2.08%)	11 (7.8%)	0
Unknown	127 (72.5%) ²	38 (28.3%)	42 (22.95%)	70 (56.9%)
Total graduates (known + unknown)	175	134	183	123
DrPH				
Employed	5 (83.3%)	6 (100%)	9 (90%)	7 (100.0%)
Continuing education/training (not employed)	0	0	0	0
Not seeking employment or not seeking additional education by choice	0	0	0	0
Actively seeking employment or enrollment in further education	1 (16.6%)	0	1 (10%)	0
Unknown	2 (25%)	2 (25%)	2 (16.7%)	1 (12.5%)

TABLE B3.1.a Graduate School of Public Health Post Graduation Outcomes, AY 2016-2017 to 2018-2019				
Post-Graduation Outcomes	AY 2016-2017 Number and percentage	AY 2017-2018 Number and percentage	AY 2018-2019 Number and percentage	AY 2019-2020 Number and percentage³
Total graduates (known + unknown)	8	8	12	8
Public Health Academic Programs (MS- Epidemiology and Industrial Hygiene)				
Employed	6 (100.0%)	7 (100.0%)	15 (100.0%)	9 (81.8%)
Continuing education/training (not employed)	0	0	0	2 (18.2%)
Not seeking employment or not seeking additional education by choice	0	0	0	0
Actively seeking employment or enrollment in further education	0	0	0	0
Unknown	16 (72.7%)	7 (50.0%)	3 (16.7%)	5 (31.3%)
Total graduates (known + unknown)	22	14	18	16
¹ Per cent distribution among the post-graduation outcome categories is based only on students for which information was collected. ² Distribution of Unknown categories is based on total number of graduates for the cohort. ³ Data presented for the AY2019-2020 graduating cohort is preliminary. The GSPH is currently in the process of gathering this information. The process occurs from September to November each academic year to provide telephone follow-up to alumni that do not respond through the electronic survey link. The complete information will be available for the Site Visit.				

2) Explain the data presented above, including identification of factors contributing to any rates that do not meet this criterion's expectations and plans to address these factors. (self-study document).

The data from **TABLE B3.1.a** is acquired through the alumni survey conducted one year after the cohort's graduation from the school. The data show that for alumni for whom information was collected, well over 80% were either employed or continuing further studies. This is above CEPH's criteria's expectation. One of the issues that can be identified in **TABLE B3.1.a** is that response rates for the alumni survey were low. For the cohort that graduated in AY 2016-2017, response rate was just 29.08% across all degrees. The alumni survey is an online survey and even with multiple reminders alumni response remained low. The school adopted a more aggressive follow-up strategy to remedy low response rates that included follow-up telephone calls. The results of these efforts were positive and response rates improved to 71.9% for the cohort that graduated in AY 2017-2018 and to 78% for the AY 2018-2019 cohort.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- Post-graduation data show that students achieve employment and/or continuing studies above the 80% required by CEPH criteria.

Weaknesses

- Data collected in 2018 for the cohort that graduated in AY 2016-17 had a low response rate of 29.08%. Hurricane María affected data collection for this cohort. The alumni survey takes place in the months around the time the hurricane made landfall. Given the lack of electricity in most of the island for months afterwards, collecting data through an online survey and other means was a challenge.

Lessons Learned

- Assessment and monitoring processes that use online surveys such as the alumni survey, require additional mechanisms to ensure a robust response rate. The experience of the school with alumni surveys shows that these efforts can be successful.

B4. ALUMNI PERCEPTIONS OF CURRICULAR EFFECTIVENESS

For each degree offered, the school or program collects information on alumni perceptions of their own success in achieving defined competencies and of their ability to apply these competencies in their post-graduation placements. The school or program defines qualitative and/or quantitative methods designed to maximize response rates and provide useful information. Data from recent graduates within the last five years are typically most useful, as distal graduates may not have completed the curriculum that is currently offered. The school or program documents and regularly examines its methodology as well as its substantive outcomes to ensure useful data.

- 1) Summarize the findings of alumni self-assessment of success in achieving competencies and ability to apply competencies after graduation. (self-study document)

TABLE B4.1.a Graduate School of Public Health Alumni Perceptions of Curricular Effectiveness ¹ , AY 2015-2016 to 2019-2020										
Alumni who reported that curriculum knowledge and skills were “Very Useful” or “Quite Useful” (on 5-point scale) in their Current Job										
Programs	AY 2015-16		AY 2016-17		AY 2017-18		AY 2018-19		AY 2019-20*	
	%	n	%	n	%	n	%	n	%	n
MPH Programs	64.2	28	77.1	35	72.1	43	81.8	88	75.5	40
DrPH Programs	100	1	100	2	100	5	100	11	85.7	6
MS Programs	50	6	80	10	80	5	88.2	34	81.8	9
MHSA Program	60	5	100	3	66.7	6	76.2	21	60.0	9
Graduate Certificate	100	1	100	2	100	2	59.1	22	90.0	9
¹ It is important to note that data reported are from alumni in curriculums before the recent curriculum reviews to comply with new CEPH criteria. Alumni from the new curriculum will participate in the alumni survey to be conducted in AY 2021-22, but these results will include alumni from two different curriculum pre- and post-review. * Data presented for the AY2019-2020 graduating cohort is preliminary. The GSPH is currently in the process of gathering this information. The process occurs from September to November each academic year to provide telephone follow-up to alumni that do not respond through the electronic survey link. The complete information will be available for the Site Visit.										

Competency Domain	AY 2017-18 N = 61		AY 2018-19 N =172	
	Competent	Partially Competent	Competent	Partially Competent
Planning and Management	57.4%	39.3%	57%	33.7%
Evidence-Based Approaches	70.5%	26.2%	71.5%	24.4%
Public and Health Care Systems	57.4%	39.3%	66.9%	28.5%
Systems Thinking	72.1%	26.2%	72.7%	22.1%
Public Health Policies	60%	35%	59.3%	34.3%
Leadership	82%	13.1%	79.5%	17%
Communication	93.4%	6.6%	86.5%	11.7%
Interprofessional Practice	85.2%	11.5%	86.5%	11.7%
Program Specific Competencies	65.6%	26.2%	64.3%	30.4%
*It is important to note that data reported are from alumni in curriculums before the recent curriculum reviews to comply with new CEPH criteria. Alumni from the new curriculum will participate in the alumni survey to be conducted in AY 2021-22, but these results will include alumni from two different curriculum pre- and post-review.				

Alumni surveys from cohorts graduating prior to 2019-2020 studied in curriculums prior to revised curriculums based on CEPH 2016 criteria. The first cohort of graduates from the revised curriculum graduated in academic year 2019-2020. Data on Table 4.2.1.a provides a broad assessment of how useful students perceive the knowledge and skills received in the curriculum in their current employment. This provides an overall assessment of curricular effectiveness independent from the curriculum of study (pre and post CEPH 2016 criteria revisions). Table B4.1.b provides information gathered from the revised alumni survey that incorporates student perceptions of mastery in the new curriculum competency domains. The GSPH gathered this information with cohorts in pre-CEPH 2016 revised criteria curriculums since it provides useful information about how the previous curriculum addressed these competency areas. It also provides a useful baseline to assess the effectiveness of new curriculum changes.

2) Provide full documentation of the methodology and findings from alumni data collection. (electronic resource file)

The alumni survey is conducted one year after a cohort's graduation. An e-mail with the survey link is sent to each graduate from the cohort. Beginning in AY 2019-2020 a second process of telephone call follow-up was added. The alumni survey reports, including a summary of data and the methodology used for data collection, is available in the **Electronic Resource File B4.2**.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- Data from the alumni survey indicates that more than 70% of graduates in the MPH, DrPH and public health MS programs found the knowledge and skills acquired in the curriculum to be useful in their current employment position.

Weaknesses

- Low response rates in the alumni survey for the cohorts that graduated in AYs 2015-16 and 2016-17 do not permit an adequate evaluation of curricular effectiveness.
- The methodology used in the alumni survey could present a selection bias. With low response rates respondents to this type of survey could be people who faced particular challenges.

Lessons Learned

- Assessment and monitoring processes that use online surveys such as the alumni survey, require additional mechanisms to ensure a robust response rate. The experience of the school with alumni surveys shows that these efforts can be successful and other strategies to complement them should be considered.

B5. DEFINING EVALUATION PRACTICES

The school or program defines appropriate evaluation methods and measures that allow the school or program to determine its effectiveness in advancing its mission and goals. The evaluation plan is ongoing, systematic, and well-documented. The chosen evaluation methods and measures must track the school or program's progress in 1) advancing the field of public health (addressing instruction, scholarship, and service) and 2) promoting student success.

- 1) Present an evaluation plan that, at a minimum, lists the school or program's evaluation measures, methods, and parties responsible for review. See Template B5-1. (self-study document)

TABLE B5.1.a GSPH Evaluation Measures		
Evaluation measures*	Identify data source(s) and describe how raw data are analyzed and presented for decision making*	Responsibility for review
Goal Statement Increase the quantity and quality of professionals in the diverse areas of the public health discipline through an accessible, competency-based curricular academic offering that promotes student success and is anchored in community needs.		
Overall Measure <ul style="list-style-type: none"> Number of New enrollments by programs 	Each September Assistant Dean of Student Affairs reports the result of the School admission process and compare data of the last 5 years (Applications, admission, enrollments vs quota/by program). Each semester Student Affairs Dean reports school wide data in faculty meeting.	Program Coordinators, Department Chairs, CAD Committee, Associate Dean, Dean
Increase the number of applications for qualified candidates to at least 50% above new student capacity in each program. <ul style="list-style-type: none"> Number of applications from qualified candidates by programs 	Each September Dean of Student Affairs reports the result of the School admission process and compare data of last 5 years (Applications, admission, enrollments vs quota/by program). Each semester Student Affairs Dean reports school wide data in faculty meeting.	Program Coordinators, Department Chairs, CAD Committee, Associate Dean, Dean
Graduate at least 70% of the students admitted to school, in the minimum period established by the accrediting agency. <ul style="list-style-type: none"> Graduation rates by degree 	Each October Dean of Student Affairs analyze data and compare data of last 5 (Master) and 8 (Doctoral) years Each semester Student Affairs Dean reports school wide data in faculty meeting. Twice a year Administrative and Academic Affairs Committee discuss graduation rates by programs.	Program Coordinators, Department Chairs, Executive Committee, Administrative and Academic Affairs Committee; Associate Dean, School Dean
Increase online academic experiences, including online educational offerings, in at least one of GSPH's specialties.	Annually Department Directors report to School Dean Office new online and hybrid offering in academic programs. Each semester Deans reports school wide data in	Program Coordinators, Department Chairs, Executive

TABLE B5.1.a GSPH Evaluation Measures		
Evaluation measures*	Identify data source(s) and describe how raw data are analyzed and presented for decision making*	Responsibility for review
<ul style="list-style-type: none"> Number of on-line or hybrid courses offered. Number of on-line educational offerings in specialty area 	<p>Semester reports which are presented in faculty meeting.</p> <p>Annually Academic Affairs Dean reports school wide data in faculty meeting.</p>	Committee, Associate Dean, School Dean
<p>Strengthen the faculty's teaching skills on new competency-based curriculums' teaching and learning methods, using technological resources.</p> <ul style="list-style-type: none"> Number of professors who participated in teaching training activities. Average training activities by professor 	<p>Each semester faculty reports to Department Directors their participation in professional development activities.</p> <p>At the end of academic year Associate Dean for Academic Affairs reports school wide data in faculty meeting.</p>	Department Chairs, Executive Committee, Associate Dean, School Dean
<p>At least a 10% increase in the practical experiences of the school through the curriculum, considering the diversity of settings and communities.</p> <ul style="list-style-type: none"> Number of community impact activities with student participation 	<p>Department Chairs report community impact activities in their program courses for each semester report.</p> <p>Annually Academic Affairs Dean reports school wide data in faculty meeting.</p>	Department Chairs, Executive Committee, Associate Dean, School Dean
Goal Statement Create knowledge through public health initiatives that meet the needs of the population.		
<p>Increase by at least 10% external funds for the support of research (Base Year 2015-2016).</p> <ul style="list-style-type: none"> Total amount of external funds received by federal, state and contract agencies 	<p>The Dean's Administration office reports the amount of funds from external sources received for research. The Dean presents the data in faculty meetings.</p> <p>Academic Chairs report research efforts and grant proposals in semester report to track efforts towards this goal objective.</p>	Department Chairs, Executive Committee, School Dean
<p>Increase by 60% faculty who have time dedicated to research and that publish, on average, at least one article per year in peer-reviewed journals. (Base year 2013-2014).</p> <ul style="list-style-type: none"> Faculty with research effort percentage (officialized by MSC policy) Faculty member with annual publication 	<p>Department Chair report faculty publications in each semester report. An annual report for the school is compiled based on this information.</p> <p>Each May of the year faculty reports with Department Directors the projection of their faculty load. Each Summer Department Directors discuss faculty load with each professor and report to School Dean for approval.</p>	Department Chairs, Executive Committee, School Dean
<p>Increase the proportion of faculty members participating in editorial boards, research advisory committees or serving as reviewers of articles in peer-reviewed journals by 10%. (Baseline: AY 2015-2016).</p>	<p>Each semester faculty reports to Department Directors their participation in research service activities.</p> <p>At the end of academic year Dean reports school wide data in faculty meeting.</p>	Department Chairs, Executive Committee, School Dean

TABLE B5.1.a GSPH Evaluation Measures		
Evaluation measures*	Identify data source(s) and describe how raw data are analyzed and presented for decision making*	Responsibility for review
<ul style="list-style-type: none"> Number of faculty in research service activities (editorial boards, research advisory committees and reviewers of articles in peer-reviewed journals). 		
<p>Increase by at least 10% the proportion of students participating as authors or co-authors in publications or oral and poster presentations arbitrated (Baseline: AY 2013-2014).</p> <ul style="list-style-type: none"> Number of students as authors or co-authors in publications Number of peer-reviewed oral and poster presentations from students 	<p>Each semester faculty reports to Department Chairs students participating in research publications and presentations.</p> <p>Each semester School Dean reports school wide data in faculty meeting.</p>	<p>Department Chairs, Executive Committee, School Dean</p>
<p>Increase by 20% the dissemination of scientific publications generated by the GSPH (Baseline: AY 2013-2014)</p> <ul style="list-style-type: none"> Number of articles published in peer-reviewed journals Number of oral and poster presentations in peer-reviewed activities 	<p>Each semester faculty reports to Department Directors scientific publications submitted and/or approved para peer-review journal as well as participation in peer-reviewed oral and/or poster presentations in professional meetings.</p> <p>Each semester School Dean reports school wide data in faculty meeting.</p>	<p>Administrative and Academic Affairs Committee; Dean</p>
Goal Statement Strengthen the active participation of the GSPH community in matters of public policy and health advocacy, and the development of models for public health services, from an ecological and sustainable development perspective.		
<p><i>Overall Measure</i></p> <ul style="list-style-type: none"> Number of Service Projects with an ecological or sustainable development perspective. 	<p>Each semester faculty reports to Department Chair their participation in service and research activities.</p> <p>A list of active collaborative agreements is compiled for each annual report.</p>	<p>Executive Committee, Administrative and Academic Affairs</p>
<p><i>Develop academic initiatives that integrate research and service to address the public health priorities of the community.</i></p> <ul style="list-style-type: none"> Number of Collaborative Agreements Number of initiatives that integrates research and Service 	<p>Each semester faculty reports to Department Chair their participation in service and research activities.</p> <p>A list of active collaborative agreements is compiled for each annual report.</p> <p>At the end of academic year Dean reports school wide data in faculty meeting.</p>	<p>Executive Committee, Administrative and Academic Affairs Committee; School Dean</p>
<p><i>Strengthen service initiatives by developing cross-sectoral and transdisciplinary partnerships at the national and international levels.</i></p>	<p>Each semester faculty reports to Department Chair their participation in service and research activities.</p> <p>A list of active collaborative agreements is compiled for each annual report.</p>	<p>Executive Committee, Administrative and Academic Affairs</p>

TABLE B5.1.a GSPH Evaluation Measures		
Evaluation measures*	Identify data source(s) and describe how raw data are analyzed and presented for decision making*	Responsibility for review
<ul style="list-style-type: none"> Number of Collaborative Service Affiliations By AY 	At the end of academic year Dean reports school wide data in faculty meeting.	Committee; School Dean
<p><i>Diversify continuing education initiatives that strengthen the CE offerings in emerging issues of relevance to public health and professional practice.</i></p> <ul style="list-style-type: none"> Number of Continuing Education Activities Number of Collaborative Agreements for Continuing Education 	<p>DECEP Director produce a report by semester updating the data of implemented educational offering.</p> <p>Each semester Associate Dean reports in faculty meeting.</p>	School Dean, Associate Dean
<p><i>At least a 10% increase in consulting offered by the faculty for technical assistance to public and private agencies and / or organizations. (Baseline: AY 2013-2014)</i></p> <ul style="list-style-type: none"> Number of Faculty Offering Consulting and Technical Assistance Service to private, government and community-based agencies. Number of Consulting and Technical Assistance Activities 	<p>Each semester faculty reports to Department Chairs Service Activities carried out to the External Community which are included in departmental semester reports.</p> <p>Each semester School Dean reports school wide data in faculty meeting.</p>	Department Chair, Dean
Goal Statement Strengthen the human, fiscal, physical, and technological resources of the GSPH.		
<p><i>Overall Measure</i></p> <ul style="list-style-type: none"> Total amount of external funds received by federal, state and contract agencies. 	<p>The Dean's Administration office reports the amount of funds from external sources received for research. The Dean presents the data in faculty meetings.</p> <p>Academic Chairs report research efforts and grant proposals in semester report to track efforts towards this goal objective.</p>	Program Coordinators, Department Chairs, CAD Committee, Associate Dean, Dean
<p><i>At least 30% of classrooms renovated with advanced communication technologies to facilitate teaching at a graduated level.</i></p> <ul style="list-style-type: none"> Number of classroom and spaces used for teaching that have been technologically renovated. 	<p>Each semester School Administrator report the update and upgrade of School facilities.</p> <p>The Dean reports efforts in these areas in each bi-annual faculty meeting.</p>	School Administrator, Administrative and Academic Affairs Committee; School Dean
<p><i>Promote school through various media and strategies, especially on social media, to target local and foreign students as a strategy to increase tuition resources.</i></p>	The Assistant Dean for Student Affairs reports these initiatives in the CAD and faculty meetings.	Department Chairs, Program Coordinators, Assistant Dean of

TABLE B5.1.a GSPH Evaluation Measures		
Evaluation measures*	Identify data source(s) and describe how raw data are analyzed and presented for decision making*	Responsibility for review
<ul style="list-style-type: none"> Number of School Programs Promotion Initiatives 		Student Affairs, Dean
*This column includes the objectives in the GSPH Strategic Plan 2017-2021 for each goal with the measures used to evaluate each objective. It also includes overall measures not related directly with objectives but that the school regularly collects for monitoring progress.		

2) Briefly describe how the chosen evaluation methods and measures track the school or program's progress in advancing the field of public health (including instruction, scholarship, and service) and promoting student success. (self-study document)

The selected measures promote student success by establishing a curriculum and activities that train future public health professionals able to meet the dynamic and changing context of local, national, and global public health. This is strengthened by providing practical opportunities throughout the curriculum in a variety of scenarios. This exposes students to real-life public health needs and the exploration of alternatives of action adapted to the Puerto Rican population, based on evidence-based practices. **TABLE B5.2.a.** demonstrate the alignment of the school's measures with how they contribute to student success.

TABLE B5.2.a. Alignment of Evaluation Plan Measures with Student Success	
Evaluation Measure	Contribution to Student Success
Number of applications from qualified candidates by academic program	Ensures that students admitted to the school are prepared for graduate studies and have a higher likelihood of completing the curriculum successfully and within the allotted time.
Graduation rates by degree	Ensures that degree programs and the school are taking actions to ensure student achievement and success in their graduate curriculum.
Number of on-line or hybrid courses offered and Number of on-line educational offerings in specialty area	Provides a more flexible academic offering that attracts other qualified candidates. Moreover, it ensures students attain technology and group collaboration skills through technological platforms, which has become an important skill in the workplace.
Number of professors who participated in training activities related to teaching.	Training in curriculum-based instruction ensures that faculty center their teaching methods on students learning the skills necessary for successful public health practice. Moreover, it ensures that instruction and evaluation strategies and techniques contribute to student learning.
Number of community impact activities with student participation	Ensures that students have practice, community integration, and service experiences both within the curriculum and through extracurricular activities. This ensures that students are better prepared for successful work in public health grounded in community realities and needs.

TABLE B5.2.a. Alignment of Evaluation Plan Measures with Student Success	
Evaluation Measure	Contribution to Student Success
Number of students as authors or co-authors in publications and Number of peer-reviewed oral and poster presentations from students	Ensures that the school is providing opportunities that enhance student career opportunities for doctoral studies and/or fellowships, as well as academic careers for those who wish to pursue them. It also provides valuable experiences to those who want to pursue a career in applied public health.

The GSPH's evaluation measures in research and service ensure that the school tracks progress in advancing the field of public health. The measures ensure that the production of knowledge adheres to the highest standards in public health disciplines and that the knowledge generated and taught in the school has an impact in public health practice. **TABLE B5.2.b.** demonstrates the alignment of the school's measures with how they contribute to advancing the field of public health.

TABLE B5.2.b. Alignment of Evaluation Plan Measures with Advancing the Field of Public Health	
Evaluation Measure	Contribution to Student Success
Total amount of external funds received by federal, state and contract agencies	Sponsored grants have a competitive peer-reviewed process, and many are aligned with emerging public health issues and discipline and practice trends. This measure allows for the tracking of the quality and pertinence of knowledge production in the field generated by the school.
Number of faculty in research service activities (editorial boards, research advisory committees and reviewers of articles in peer-reviewed journals).	Ensures that the school contributes to professional service activities in the peer-review process on which evidence-based public health depends.
Number of Publications in peer-reviewed journals and Number of oral and poster presentations in peer-reviewed activities	Ensures the quality and quantity of academic production in the school
Number of Collaborative Service Affiliations By Academic Year	Ensures that the school contributes to the advancement of public health practice in the community.
Number of Continuing Education Activities and Number of Collaborative Agreements for Continuing Education	Ensures that the school contributes to public health practice and practitioners by maintaining the public health workforce up to date on public health issues, approaches, and research/practice/service initiatives.
Number of Faculty Offering Consulting and Technical Assistance Service to private, government and community-based agencies and Number of Consulting and Technical Assistance Activities	Ensures that the school contributes to its overall mission of contributing to the health and wellbeing of the population. In this process it advances the field of public health by reaffirming its importance to stakeholders and policymakers.

- 3) Provide evidence of implementation of the plan described in Template B5-1. Evidence may include reports or data summaries prepared for review, minutes of meetings at which results were discussed, etc. Evidence must document examination of progress and impact on both public health as a field and student success. (electronic resource file)**

The Dean, Associate Dean, department chairpersons, school administrator, CAD, and COPE use multiple data sources to assess outcome indicators. These outcome indicators are presented in a variety of reports and scenarios, which include: faculty member semester activities report; integrated budget reports; financial data; instruction, research, service, students and administrative productivity data; admission and enrollment data; student exit and alumni surveys; graduation rates; Continuing Education Division annual report; and school annual reports. During CAD monthly meetings, faculty and academic administration discuss specific activities that contribute to the achievement of strategic plan goals. The GSPH reviews key indicators continuously in those academic and administrative committees. These reviews serve as the basis for decision-making and policy reviews. Standing committees not only review key indicators but also develop, review, and approve policies and procedures to improve educational programs and services. Other activities in the school to improve educational programs occur in program faculty and department meetings and in trimester program coordinator meetings with the Associate Dean of Academic Affairs.

Moreover, the department semester report (as well as the Associate Dean and Assistant Dean's semester report) is structured by each goal and corresponding objective of the GSPH Strategic Plan 2017-2022 which is the basis for the evaluation plan of the school. The Dean's report presented in each bi-annual faculty meeting is also structured by the strategic plan goals and objectives. This allows for the continuous monitoring of activities that contribute to the fulfillment of the school's strategic goals. Documentation is provided in **Electronic Resource File B5.3**.

- 4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

Strengths

- Appropriate evaluation measures have been established to assess GSPH strategic goal progress. These measures are discussed at different levels to support decision-making processes.

Weaknesses

- Several measures rely on faculty activity reports each semester. Due to recall bias, errors in reporting, or activity report submission issues, data on some measures could be sub-reported.
- Despite adjustments in data collection forms and procedures in the GSPH, there is still some difficulty collecting information of all the different types of activities in which faculty, students and the school as a whole is engaged in. During the review of reports and information for the self-study sub-reporting of faculty and school activities and initiatives was identified.

Lessons Learned

- The School needs to evaluate measures and data collection processes in a continuous manner to adapt methods and strategies. It is currently working on a plan to make evaluation data collection more efficient.

B6. USE OF EVALUATION DATA

The school engages in regular, substantive review of all evaluation findings, as well as strategic discussions about the implications of evaluation findings. The school or program implements an explicit process for translating evaluation findings into programmatic plans and changes and provides evidence of changes implemented based on evaluation findings.

- 1) Provide two to four specific examples of programmatic changes undertaken in the last three years based on evaluation results. For each example, describe the specific evaluation finding and the groups or individuals responsible for determining the planned change, as well as identifying the change itself. (self-study document)**

The GSPH continuously monitors evaluation results and determines courses of action to address any issues identified. This section describes four specific examples in the areas of: evaluation data process review; course review and evaluation; and student and program success evaluations.

The GSPH is constantly monitoring the assessment data collection processes. One issue that was identified in AY 2019-20 was that response rates for the alumni survey conducted the previous year was too low (29.08%). The Assistant Dean of Academic Affairs brought the issue to the Administrative and Academic Affairs Committee (CAD) where it was decided that online survey methods were not enough, and alternative follow-up procedures needed to be adopted. The Associate Dean of Academic Affairs and Assistant Dean of Student Affairs were tasked with presenting a plan that could increase response rates. The Associate Dean's Office identified that a pilot methodology for telephone follow-up could be implemented but it would require adapting the survey for non-respondents from online to telephone mode of administration. It also required updating alumni contact information. The Office of Curriculum and Evaluation Director in the Associate Dean's Office prepared a plan that would use the opportunity afforded by a course she was teaching (EDSA 6571 Evaluation of Health Education and Promotion Programs) to develop and implement a telephone follow-up process for the alumni survey. In conjunction with the Assistant Dean's Office, it was decided that program coordinators were the closest to their alumni and could identify updated contact information. The plan was brought to the CAD where department chairpersons were tasked with ensuring program coordinator and department administrative assistant's support in identifying updated contact information for the cohort of alumni. The alumni survey was revised for telephone follow-up by students in the EDSA 6571 course, supervised by the school's curriculum and evaluation director, and mock interviews were conducted in preparation for follow-up procedures. The Assistant Dean's office coordinated with program coordinators the collection of updated contact information. The alumni survey was conducted using the same method through online surveys, but the Student Affairs Office identified alumni that had not completed the survey for follow-up and referred them to the Office of Curriculum and Evaluation who had students in the course conduct the follow-up telephone calls. The process yielded a response rate of 71.9%. The school achieved its objectives and in the process students were able to learn about evaluation planning and execution through an applied experience. The results of the initiative was presented to the CAD and subsequently in the bi-annual faculty meeting in December. The following year (AY 2020-2021) the Assistant Dean's Office adopted the strategy identifying work-study program students to serve as follow-up interviewers. It was presented to the CAD prior to conducting the alumni survey to ensure program coordinator and administrative assistant support. The response rate this year was 78%. These strategies have now been adopted by the school for the alumni survey. This example shows how identified issues in evaluation data are reported and how issues are addressed. It further demonstrates the importance of the CAD in ensuring

support for actions as department chairpersons and faculty representatives from all departments are members of the committee and decisions and initiative follow-up emanate from this body.

The GSPH's graduation rates are another example of programmatic changes based on evaluation data. The UPR system uses as an indicator student graduation at an established minimum time to completion that is more restrictive than the time used for CEPH accreditation. For this reason, the school is very aggressive in monitoring and taking actions on graduation rate indicators. Graduation rates are continuously monitored and presented in CAD meetings and faculty meetings. In AY 2017-2018 graduation rates were identified as an issue for Master's in Science programs. The result of data review was that programs were required to do an analysis of causes for graduation rates not reaching expected institutional measures. Programs had to develop a plan of action to address the issue, the results of which yielded various actions such as changes in degree extension policies and revisions of integrative learning experience (change from thesis to other high-quality products). In AY 2018-2019 graduation rates were reviewed again for all academic programs of the school including selective demand indicators. In Executive Committee and CAD meetings indicators were reviewed and evaluated and programs that did not meet expected institutional and school goals were selected. Program coordinators of selected programs were tasked with developing a program report in which they identified and analyzed academic program performance indicators. They were also tasked with including an action plan to address the causes of substandard performance indicators as part of the report. The Associate Dean's office was charged with monitoring this process and presenting the program action plans to the Executive Committee for review. As a result of this process the following actions were taken in some programs: curricular revision in which required credits for program completion were reduced (MS in Nutrition and Evaluation and Research Programs and Health Services Administration Program). As part of this review process for the DrPH, programs adopted extracurricular activities for the selection of possible dissertation topics earlier in the curriculum. In the graduation rate reviews in AY 2019-2020, the curriculum was evaluated based on the revised curriculum and more realistic expectations of the institutional minimum time for completion was reassessed. It was determined that the minimum time to completion for institutional graduation rates was too aggressive and an official change to the minimum time of completion was requested and approved after being reviewed by the Dean of Academic Affairs of the MSC. In AY 2020-2021 the DrPH graduation rate based on CEPH criteria that was reported in the GSPH's annual report did not meet the required expectation. This was presented in both CAD and the faculty meeting in December. A meeting with DrPH program coordinators was coordinated where they were tasked with conducting an analysis of all enrolled doctoral students' progress to identify any issues that need to be addressed. Actions taken to impact graduation rates for doctoral programs take time to show their impact, but the school maintains a continuous monitoring process. This example of graduation rates across four years shows the type of monitoring and actions that the GSPH implements as part of its continuous evaluation process.

The school reviews demand for each program through the assessment of the number of applications received by each academic program compared to its new student capacity. In 2018-19 the possibility of increasing the new student capacity of high demand programs was presented in the Executive Committee and CAD. The discussion was generated by review of admission application data where some programs had high demand. Coordinators of high demand programs were tasked with analyzing the viability of increasing the number of new students each year based on available program faculty resources and their academic load. The result of this process was the increase of new student admission capacity for the MPH program with specialty in epidemiology.

The last example of actions based on assessment results is the review of the "SALP 6006: Introduction to Public Health" course. This is a central course of all masters academic programs in the school. It provides students with the foundational knowledge in public health required by CEPH criteria and has always been

an important course in the school. Given its importance and impact (it is a pre-requisite for continuing the curriculum in the school), any changes to the course are reported to the CAD and in faculty meetings. In AY 2017-18 it was decided that the course would be designed as a hybrid offering in which the knowledge portion of the course would be offered online through asynchronous learning modules of lectures with participation of faculty from all departments. The in-person component of the course was reserved for the application of knowledge through the discussion of different case studies guided by facilitators. The new design of the course was implemented in AY 2018-19 and results of the implementation were presented to both the CAD and the faculty. Among the evaluation procedures enacted was an evaluation of student's performance by comparing the grade distribution with in-person offerings on prior years. Another evaluation responded to student's experience and preference of online and in-person offering of the course. One of the interesting things identified was that evening students preferred the online offering while day students preferred in-person instruction. The GSPH's evening student profile is composed of professionals who work full-time so for them a hybrid online/in-person offering provided more flexibility in the use of their time. These evaluations resulted in three adjustments to the course. First, some topics were reinforced to make sure enough time was dedicated to all the required foundational knowledge areas. Second, more synchronous online activities were integrated so students had more opportunities to ask questions to accommodate student preferences for more interaction. Third, changes were made to the case study to provide more in-person interactions and guidance to case-study groups. The new changes were implemented in AY 2019-20. In this second year of the course through hybrid instructional methods, it was identified in one of the exams that students had difficulty in the Behavioral and Social Determinants component of the course. To ensure student learning in these foundational areas, an in-person reinforcement activity was coordinated with the faculty member that provided the online learning modules, and students who participated received extra credit to help in their final course grade. Participation in this activity was high and students communicated that it had been beneficial to have the lecture live and in-person with the faculty member. In AY 2020-21 a synchronous session with the faculty member that provides Behavioral and Social Determinants of Health content for the course was included in the schedule and evaluation results in the exams showed that this area was not an issue. An evaluation report of the course was prepared during this third year and it was provided to the Associate Dean. The issue identified in this evaluation was that students felt that the time commitment required by the course was not commensurate with the credit assigned to it. The assessment process validated students expressed view. However, in order to not affect students by adding another credit to the course (which implied a higher cost of tuition), one credit was assigned for a two to one equivalence in terms of credit to contact hour. This was justified by the applied nature of the case study activity. This change allows for recognition of the time commitment required in the course. This change has been submitted to official review to the MSC Dean of Academic Affairs to be implemented in AY 2021-22. All changes to the SALP 6006 course are presented to the CAD and the faculty for recommendations. This example shows the continuous process of using evaluations for continuous improvement of courses that impact most of the school's academic programs.

The above are just four examples of how evaluation and assessment procedures and data are used in the school to ensure that it fulfills its mission and objectives, maintains program quality, and ensures student learning.

2) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The school has procedures for the continuous monitoring of evaluation data and mechanisms for action to address identified challenges.

Weaknesses

- The documentation process of decision-making is available but not consistent across all records. Some committee meeting records provide the final decision and issue discussed but present in concise manner the arguments underpinning the decision. The school is reviewing the way decisions are documented in meetings to provide a consistent approach across all committees.

Lessons Learned

- Decision-making registration in the school needs to be reinforced so documents reflect not only that an issue was discussed and approved but also a better description of the issues raised in the discussion.

C1. FISCAL RESOURCE

The school or program has financial resources adequate to fulfill its stated mission and goals. Financial support is adequate to sustain all core functions, including offering coursework and other elements necessary to support the full array of degrees and ongoing operations.

1) Describe the school or program’s budget processes, including all sources of funding. This description addresses the following, as applicable:

There are three main sources for the GSPH budget: (1) the UPR System general budget, (2) tuition and fees from evening academic programs, continuing education, and service programs, and (3) grants, contracts, and donations. Besides the funds assigned by the Puerto Rico Legislature, the University budget includes tuition and fees, and external funds. This is what is referred to as “University Funds” since these are distributed by the UPR Central Administration to each campus. The GSPH budget process is an integral part of the MSC and UPR system budgeting process which starts with the UPR Board of Trustees, which allocates the yearly funds for each campus and the UPR Central Administration with the advice and recommendations from the UPR President. To allocate the yearly funds, the UPR Central Administration requests UPR schools and campuses to develop their budget request proposal based on the institutional mission and strategic plans. At the MSC level, the Administrative Board makes budget recommendations to the Chancellor regarding the campus-wide budget and resource allocation based on the needs and the budget proposal submitted by each school. The Administrative Board of the MSC is composed of: the deans of each of the six schools (including the GSPH); the MSC Deans of Academic Affairs, Administration, Student Affairs and Research; one elected student representative; and two elected faculty representatives from the Academic Senate. Once assigned, the schools have considerable autonomy regarding the use of their allocated funds.

The main source of funds for the UPR System are government appropriations. Each fiscal year, the Puerto Rico Legislature assigns revenues to the University. This process used to be based on assigning 9.6% of Puerto Rico government’s average revenues from the previous two years to the UPR University System. However, Puerto Rico is undergoing a profound fiscal crisis. The result has been a continuous reduction in revenue with accompanying reductions in the UPR budget.

Since 2016, the UPR is a covered entity by the Oversight Board under Title III of the U.S. Congress “Puerto Rico Oversight, Management, and Economic Stability Act” (PROMESA). As a covered entity, by virtue of being a state university funded by government revenue, the UPR is required to submit to the Oversight Board an annual individual fiscal plan for its certification. PROMESA was created because the Commonwealth of Puerto Rico is amid a profound fiscal, economic and liquidity crisis, the culmination of many years of significant governmental deficits, a prolonged economic recession, high unemployment, population decline, and high levels of debt and pension obligations. These fiscal challenges have driven a significant reduction in appropriations historically directed towards UPR’s operations in recent fiscal years. Prior to the start of PROMESA law, the Commonwealth funded approximately \$833 million or 72% of the UPR’s annual expenses. The remaining 30% was provided by the University’s own revenues and federal funds. In contrast, the funding structure of most mainland public universities is based on a majority of funds coming from tuition, federal dollars, and self-produced revenues. Under the PROMESA law, however, the UPR’s Commonwealth appropriations have been reduced by over \$330 million through FY’20. On June 5, 2019, the Oversight Board certified its own fiscal plan for the UPR for fiscal years 2019 to 2024 (the UPR 2019 Fiscal Plan). The UPR administration has adopted a series of measures to increase other sources of revenue and reduce its dependence on government appropriations, among them:

increase in student tuition, increase in measures to obtain additional external funding procurement in research and service activities, and administrative operational efficiency measures, among others. It is important to underscore that, given these events, changes in the external environment clearly have an impact on the level of attainment of projected goals and objectives. However, at all levels from the UPR, RCM and GSPH level, budget decisions are guided by strategic plans, their objectives, and priorities.

Since Academic Year 2016-17, the UPR has had a significant reduction in its budget because of the Oversight Board's fiscal measures. As a result, several budget reduction measures were implemented and applied system-wide. All campuses had a budget reduction which for the GSPH represents an 11.23% reduction in AY 2020-2021 in comparison with AY 2016-17 (year before the beginning of the school's current strategic plan). Each school in the MSC is given the option of determining how to address budget reductions. The GSPH administration, i.e., deans and department chairpersons, in consultation with the Administrative and Academic Affairs Committee, establishes the guidelines and priorities for the school to meet these budget reduction challenges. The primary goal has been to preserve the needed academic functions that ensure a high-quality education in Public Health, and one of the top priorities is meeting or exceeding all accreditation standards. This is a priority shared by the UPR system and MSC administration. Accreditation related budget justifications are given the highest priority for budget assignment and allocation at all levels of the UPR system.

Under the premise that the budget assigned to the GSPH by the MSC Chancellors Office from the Commonwealth government funds will not increase over the next several years, a temporary strategy used by the GSPH administration has been to allocate and redistribute funds from vacant faculty and nonteaching personnel positions (due to retirement or resignations). This is possible since the salaries for all tenured and tenure-track faculty positions and permanent non-faculty personnel at the GSPH are fully funded from the UPR General Fund which are recurrent funds. However, the GSPH administration has been very aware of the limits and short-lived nature of these measures given that the academic programs require a minimum number FTE of faculty and non-faculty personnel to achieve the high standards of academic quality required by CEPH and expected by the GSPH community for the formation of public health professionals that can meet the health challenges of Puerto Rico. Therefore, the recruitment of new and additional faculty and staff in vacant or newly created positions, has been governed by a strict assessment of the projected institutional need, based on the demand for academic programs and support services.

- a. Briefly describe how the school or program pays for faculty salaries. For example, are faculty salaries fully guaranteed, or are faculty expected to raise funds to support salaries? If this varies by individual or appointment type, indicate this and provide examples. For programs, if faculty salaries are paid by an entity other than the program (such as a department or college), explain.*

As mentioned above, all tenured or tenure-track faculty are fully funded by UPR funds allocated to the Graduate School of Public Health as part of the budgeting process, and salaries are fully guaranteed. UPR funds for tenure-track and tenured positions are considered recurrent funds and are guaranteed by the UPR System. Full-time primary instructional faculty (PIF) in non-tenure track positions are funded mainly by UPR funds which can be supplemented from other sources of funding, such as departmental funds from evening program tuition and continuing education and service activities. Non-primary instructional faculty (Non-PIF) salaries are funded from a variety of sources depending on the main focus of their academic load in research, teaching or service activities. Non-PIF faculty with appointments in service or research projects raise funds to support their salaries, but these may be supplemented with other funds, such as evening program tuition, to support their teaching activities. Non-PIF faculty who offer limited teaching (part-time or per course) are mainly funded with departmental funds such as evening program

tuition and continuing education activities. The last category of faculty are public health practitioners who have full-time employment outside the UPR, but are recruited to teach courses based on their particular expertise. They are valuable assets for the GSPH and tend to bring extraordinary public health practice experience to our students.

- b. Briefly describe how the school or program requests and/or obtains additional faculty or staff (additional = not replacements for individuals who left). If multiple models are possible, indicate this and provide examples.*

There are two ways of filling needs for new faculty or staff positions. For tenure track positions or staff positions with the possibility of permanence, which require the allocation of guaranteed salaries with recurrent funds, the school must submit a request to the MSC Chancellor. In these cases, the GSPH must identify and justify the need for the new position. Given the UPR's recent fiscal situation, the justification must be aligned with institutional priorities and strongly demonstrate the need. Requests that are made as a response to accreditation criteria or process compliance are given the highest priority. After the Chancellor receives the request, it must be approved by the Administrative Board and subsequently by the UPR President. The second way in which the school fulfills needs for faculty or staff is by identifying the funds from within its budget. This process does not require the same level of approval. As with all contracts, once the school has identified the funds, it submits the contract with the required justification of need to the Chancellor for approval. This provides a more flexible mechanism for meeting immediate needs and is a function of the school's degree of autonomy.

- c. Describe how the school or program funds the following:*

- a. operational costs (schools and programs define "operational" in their own contexts; definition must be included in response)**

Operational costs refer to all activities that are required to maintain the school's operations, fulfill its commitments and objectives. Operational costs include maintenance of facilities and equipment, the requisition of materials and equipment, accreditation fees, and student support services. Operational costs also include those associated with implementing service and research projects which are mandated with restricted funds based on grant objectives as approved by external sponsoring institutions. Operational costs are funded from all income sources in the GSPH budget.

- b. student support, including scholarships, support for student conference travel, support for student activities, etc.**

Graduate students have several sources of resources available at the MSC to help pay tuition, dissertation costs, and other related needs. These are described below.

Graduate Assistantship Program - The UPR-RCM Dean of Academic Affairs coordinates and administers the Graduate Assistantship Program for teaching and research. All graduate students who do not hold a full-time job are eligible for this program to receive research or teaching assistantships. The program is merit based and participating students must maintain a GPA of 3.0 or above in each academic session. Moreover, the assistantship program covers tuition costs for day program students, and also provides them with a stipend along with valuable experiences working with GSPH faculty on research and service projects.

Financial Aid - The UPR-RCM Financial Aid Office oversees and manages financial assistance programs for students in compliance with U.S. Department of Education policies and criteria. Financial aid funds are provided by the Puerto Rico Legislature, the federal government, institutional funds, and private donations. Student loans are also available.

Travel Expenses and Other Activities - The GSPH has different mechanisms to support student travel and other related activities for scientific presentations, workshops, and other research and scholarly activities. The main source of these funds is through departments and the Assistant Dean of Student Affairs' office. Funds are also available for students participating in service and research projects. Priority for travel funds is given to students who have oral and poster presentations accepted in peer-reviewed professional conferences.

Workforce Development Grants - Another source of support for some students is available through workforce development grants obtained by the GSPH through competitive grant applications. Currently the school has two of these projects. The "University of Puerto Rico – Caribbean Center for Professional Industrial Hygiene Training", financed by the National Institute for Occupational Safety and Health (NIOSH), funds student tuition in the Master's in Science in Industrial Hygiene. The "Puerto Rico Geriatric Workforce Enhancement Program", financed by HRSA, provides funds for tuition and fees for students who wish to pursue the Graduate Certificate in Gerontology, in addition to their currently enrolled program.

Students may also receive support from service and research projects in the school and the MSC which may provide students with paid opportunities and support for travel and other professional development opportunities.

c. faculty development expenses, including travel support. If this varies by individual or appointment type, indicate this and provide examples.

A combination of UPR funds, tuition, fees, and external funds are used to finance faculty development expenses, travel and conference support. Department funds are the main source of faculty travel and professional development, mainly funded by evening program tuition, continuing education activities, and indirect funds. Moreover, faculty with externally funded research and service grants use these funds and indirect costs for professional development and travel.

d. In general terms, describe how the school or program requests and/or obtains additional funds for operational costs, student support and faculty development expenses.

Due to significant budget reductions at the UPR system, required by the Oversight Board and implemented by the Commonwealth government, there have been significant budget reductions across all UPR campuses and schools, including the MSC campus and the GSPH. To plan effective mechanisms for dealing with these budget reductions, in academic years 2018-2019 and 2019-2020, the GSPH participated in a series of workshops, sponsored by the MSC Chancellor and the Dean for Academic Affairs, to analyze priorities and establish the alignment between strategic goals, budget, and operational plans. The MSC Chancellor and Deans of all campus schools, including the GSPH, identified and prioritized objectives to maintain professional accreditations, strengthen student services, revise academic programs, conduct research in competitive areas, faculty evaluation, research infrastructure, remodeling of physical facilities, technology infrastructure, continued improvement of administrative processes, and fund raising. To obtain additional funds, the GSPH must justify the need based on the priorities established by the UPR,

MSC and the GSPH. Additional fund requests with justifications are directed towards the MSC Chancellor from the Dean of the School.

- e. Explain how tuition and fees paid by students are returned to the school or program. If the school or program receives a share rather than the full amount, explain, in general terms, how the share returned is determined. If the school or program's funding is allocated in a way that does not bear a relationship to tuition and fees generated, indicate this and explain.**

The tuition costs of students who enroll in evening academic programs are collected in each departmental account. Evening programs are designed to be self-sufficient and provide the department and the GSPH with the flexibility to allocate these funds to evening program implementation and other department and school priorities. The tuition costs for students who enroll in day programs are directed to the MSC institutional account. In exchange for collecting tuition from day programs, the GSPH receives its share of UPR funds which combine government appropriations allocated to the University, student tuition and fees, and other external funds.

Another income controlled by the GSPH is the technology fee paid by all students. In Certification 70 (2004-2005), amended by the then Board of Trustees, it was established that: "... A Technology Fee of \$25 that will be payable for each period a student enrolls; provided that the funds from said fee shall be collected into the Technology Fund of the University of Puerto Rico, which shall be established for those purposes and shall be used to defray expenses for said concept, in accordance with the rules to be established by the President of the University for such purposes. " It was established that the technology fee will be entered into a fund to update, expand, and improve technology resources for student use. To facilitate the process of allocating these funds, the UPR created guidelines and criteria that must be used at all campuses for the process, evaluation, assignment, purchase, and implementation of technological resources for students. To request these technology funds the UPR established a procedure according to each campus' needs in which the Chancellor constitutes a committee that evaluates the applications to allocate funds for each school. Priority is given to proposals that maximize the use of the proposed technological resources through scale savings and that impact a greater number of students. The GSPH develops an annual proposal for the use of the funds collected from its students' technology fee. A recent example of the GSPH's use of these funds is the "WIFI ZONE" that was designed and implemented in the school to offer ten additional work spaces (cubicles) for students to use their laptops, tablets, and any other mobile device.

- f. Explain how indirect costs associated with grants and contracts are returned to the school or program and/or individual faculty members. If the school or program and its faculty do not receive funding through this mechanism, explain.**

The University of Puerto Rico and the Medical Sciences Campus have established Policies and Procedures regarding the internal distribution and utilization of recovered indirect costs from grants and contracts at the campus. The MSC prioritizes the use of its recovered indirect costs to support new research initiatives, and to enhance and expand its research development infrastructure. The recovered indirect cost at the MSC is distributed according to the following formula: 25% to the UPR-Central Administration, 12% to the MSC Chancellor's Office, 20% to the MSC Deanship of Research, 15% to the MSC Deanship of Administration, 7% to the school, 10% to the department, and 11% to the principal investigator that generates the recovered indirect cost.

- 2) A clearly formulated school or program budget statement in the format of Template C1-1, showing sources of all available funds and expenditures by major categories, for the last five years.

TABLE C1.2.a. GSPH Budget Statement Sources of Funds and Expenditures by Major Category for FY 2016-17 to 2021-22						
Category	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Source of Funds						
Tuition & Fees	666,989	674,152	716,047	1,261,855	1,274,403	*1,268,129
State Appropriation	624,899	596,324	518,681	530,782	366,223	405,877
University Funds	9,084,201	8,415,711	8,264,228	7,427,206	7,449,478	6,689,155
University Funds IDD ¹	-	-	-	-	614,000	590,393
Grants/Contracts	8,858,080	9,170,996	8,142,852	10,088,269	13,500,344	*7,522,108
Indirect Cost Recovery	104,765	126,134	162,638	205,656	273,769	*260,080
Continuing Education	129,711	141,613	112,883	41,537	43,874	*66,098
Total	\$19,468,645	\$19,124,930	\$17,917,329	\$19,555,305	\$23,522,091	\$16,801,840
Expenditures						
Faculty Salaries & Benefits	10,789,654	10,337,331	9,892,096	8,545,352	7,996,785	*8,271,069
Staff Salaries & Benefits	3,325,121	3,201,921	1,899,421	2,788,949	4,096,524	*3,442,737
Operations ²	4,722,068 [#]	4,942,155 [#]	5,227,891	\$7,382,430	10,745,428	*4,327,070
Travel			44,712	37,560	3,632	*20,596
Student Support	631,802	643,523	853,209	801,014	679,722	*740,368
Total	\$19,468,645	\$19,124,930	\$17,917,329	\$19,555,305	\$23,522,091	\$16,801,840
<p>*These figures are projected estimates for the current budget period.</p> <p>#Operations and travel expenditures were reported as one category for years 2016-17 & 2017-18.</p> <p>¹ These funds are for the administration and operation of a preschool development center administered by the Institute of Developmental Disabilities. The center serves as a practice site for health and social professionals.</p> <p>² Includes not only school operational expenses. Included in this figure are expenditures for the execution of research and service grants and contracts.</p>						

TABLE C1.2.b. Description of Fiscal Resources Categories Source of Funds	
Sources of Funds	Description
Tuition & Fees (Evening Programs)	Revenues from Tuition and Fees from Evening Programs, which must be financially self-sustaining.
University Funds	Funds allocated to the GSPH by the MSC through the UPR system budgeting process. These funds include legislative state appropriations, tuition and other external funds to the UPR system.
State Appropriation	Besides appropriations used for University funds the Commonwealth has appropriations for services, research, and social studies. From these other appropriations the GSPH receives funds for various projects. Student support in the Graduate Student Assistantship Program and the Work/Study Program pertain to this category.

TABLE C1.2.b. Description of Fiscal Resources Categories Source of Funds	
Sources of Funds	Description
Federal Grants/Contracts for Instruction, Services and Research/Sub-contracts Funds	Funds from competitive and non-competitive federal grants submitted yearly by faculty, and revenues from sub-contracts with other entities.
Indirect Cost Recovery	The GSPH receives 28% of the total Indirect Cost of its federal Grants divided between the school, departments and grant PIs.
Matching Funds & Special Projects Appropriation	Fund from the UPR Central Administration to match research or service funds, or for special projects.
Continuing Education & Others	Revenues from Tuition and Registrations Fees of Continuing Education Program, which must be financially self-sustaining.
Private Funds and Others	Funds from the private sector which contract the GSPH for a variety of service, research, or instructional activities.

The GSPH's budget for FY 2020-2021 was \$23,522,091, which was obtained from the following sources: 57.3% from grants and contracts, 31.6% from the UPR General Fund, 5.4%% from tuition and fees, 1.5% from state appropriations, and 2.6% from other funds. **TABLE C1.2.a** presents the detailed budget for the period under review by fiscal year and sources of funds. For the whole period (FY 20016-2017 through FY 2020-2021 with a projected estimate of 2021-22).

During the period presented, the annual budget has been relatively stable except for FY 2018-2019 when the budget decreased by \$1.2 million which represented a 6.3% decreased relative to FY 2017-2018. This was driven by a significant reduction in funds related to the effects of Hurricanes Irma and Maria in September of 2017 and its impact on UPR funds, state appropriations, and government contracts. The hurricanes had a profound negative impact on the Puerto Rican economy that significantly reduced government tax revenues. Since the main source of funds for the UPR is a fixed proportion of state revenues, the annual flow of funds is sensitive, not only to economic cycles, but also to natural disasters. In addition to the impact of the hurricanes, the Puerto Rican economy has been in a very deep economic crisis during the last decade and, as explained before, the Commonwealth is bankrupt and under the supervision of an Oversight Board.

The budget reductions that the Oversight Board have been imposing on the UPR General Fund affected all system campuses and schools, including the GSPH. However, as can be seen in **TABLE C1.2.a** the GSPH was successful during this period in increasing funds from federal grants and contracts which somewhat compensated the impact of the reductions in UPR funds and state appropriations. Moreover, the increase in student tuition costs also served as a mechanism to mitigate this impact. However, further reductions imposed by the Oversight Board on the UPR general fund could constitute a serious challenge to the financial stability of the UPR, MSC and the GSPH. **TABLE C1.2.a** also presents the GSPH's distribution of funds for faculty and staff salaries and benefits, student support, operations, and others from FY 2016-2017 to 2020-2021. Reductions from the Oversight Board to the University of Puerto Rico will continue until fiscal year 2023. Based on the "2020 University of Puerto Rico Fiscal Plan" from the Oversight Board, the largest budget reduction was implemented in the current fiscal year (for academic year 2021-22) with a 94 million dollar state appropriation budget reduction. As can be seen in Table C1.2.a the budget reduction in university funds for the GSPH during this year was \$760,323USD. These state appropriations to the University of Puerto Rico are partially offset with tuition increases and other measures. State

appropriations for the University of Puerto Rico are scheduled to decrease once again in the next fiscal year (corresponding to academic year 2022-23) with a reduction of 24 million dollars. According to the “2020 University of Puerto Rico Fiscal Plan” appropriations for the University of Puerto Rico will remain stable without further reductions for the two following fiscal years (FY24 and 25).

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- Despite the economic impact of fiscal measures and budget reductions in university funds to the UPR system under the Oversight Board, the effect of natural disasters (such as hurricanes Irma and Maria in 2017 and earthquakes in 2020), and the COVID-19 pandemic during years 2020 and 2021 the GSPH has been able to keep a relative stable budget from FY 2016-2017 to FY 2020-2021 by partially mitigating the reductions in university and state appropriation funds by increasing funds from grants and contracts and through an increase in student tuition costs. This is a testament to the school’s faculty commitment, efforts, and resiliency during the challenging past five years.
- It is a testament to the GSPH’s faculty expertise, skill, and commitment that research funds have increased an average of 50.5% during the past five years in comparison with AY 2015-16 (our strategic plan base year for evaluation of our goals). This accomplishment was reached with a reduction in full-time faculty during this period.

Weaknesses

- The reductions in university funds have reduced the GSPH’s capacity to replace tenured faculty and permanent staff who retire. The ratio of non-faculty employees to faculty members experienced a reduction from FY 2016-2017 to FY 2020-2021.
- Given the increased workload, the GSPH is relying more heavily on part-time personnel. This has led to a reduction in operations and administrative capacity and productivity in most departments and in the Deans’ office.
- Many experienced and knowledgeable faculty and non-faculty employees are eligible to retire since they have completed the required time of service and retirement age.

Lessons Learned

- The GSPH has shown extraordinary resiliency and capacity to mitigate the reduction in university and state appropriation funds, although there are structural factors related to human resources that may limit its capacity to absorb further reductions.
- It is important that the GSPH community (faculty, staff, and students) promotes a more proactive and aggressive public policy strategy seeking to limit further budget reductions.
- Further substitution of university and state funds with grants and contracts has its limitations because these are becoming increasingly difficult to obtain and competitive each year.
- The GSPH needs to strengthen its strategic planning process to include faculty and staff succession plans, and its administrative and academic efficiency and organization plans to sustain the high standards and quality of its academic programs.

C2. FACULTY RESOURCES

The school or program has adequate faculty, including primary instructional faculty and nonprimary instructional faculty, to fulfill its stated mission and goals. This support is adequate to sustain all core functions, including offering coursework and advising students. The stability of resources is a factor in evaluating resource adequacy. Primary instructional faculty, as defined in these criteria, provide the basis for initial levels of review of the adequacy of a school or program's resources. This criterion employs a three-step review (outlined in C2-A through C2-C) in assessing adequacy of faculty resources.

- 1) A table demonstrating the adequacy of the school or program's instructional faculty resources in the format of Template C2-1. (Note: C2-1 has different formats for schools vs. programs.)

TABLE C2.1.a. GSPH Faculty Resources, AY 2020-2021					
		FIRST DEGREE LEVEL			SECOND DEGREE LEVEL
CONCENTRATION		PIF 1*	PIF 2*	FACULTY 3^	PIF 4*
General Option		Marisol Peña 1.0	Ralph Rivera 1.0	Rosa Marchand 1.0	NA
	MPH				
Environmental Health		Luis Bonilla 1.0	José Seguinot 1.0	José Norat 1.0	Imar Mansilla 1.0
	MPH				
	DrPH				
Biostatistics		Gilberto Ramos 1.0	Erick Suárez 1.0	Claudia Amaya 1.0	NA
	MPH				

TABLE C2.1.a. GSPH Faculty Resources, AY 2020-2021						
		FIRST DEGREE LEVEL			SECOND DEGREE LEVEL	ADDITIONAL FACULTY*
CONCENTRATION		PIF 1*	PIF 2*	FACULTY 3^	PIF 4*	
Epidemiology		Linnette Rodríguez 1.0	Cruz María Nazario 1.0	Juan Carlos Reyes 1.0	NA	PIF: 2 C. Pérez, R. Rosario
	MPH					Non-PIF: 4 A.P. Ortiz
	MS					
Public Health Education		Marcilyn Colón 1.0	María Borges 1.0	Daisy Gely 1.0	NA	PIF: 2 S. Rabionet, I. García
	MPH					Non-PIF: 5
Gerontology		José Carrión 1.0	Nirzka Labault 1.0	Edgardo Ruiz 1.0	NA	PIF: 0
	MPH					Non-PIF: 3 A. Marrero, W. Rosich
Health Systems Analysis and Management		Ruth Ríos 1.0	Heriberto Marín 1.0	Roberto Ramírez 1.0	NA	PIF: 0
	DrPH					Non-PIF: 2 Karen Ortiz See Health Services Administration
Social Determinants of Health		Hiram Arroyo 1.0	Carmen Vélez 1.0	Marinilda Rivera 1.0	NA	PIF: 1 M. Bustillo

TABLE C2.1.a. GSPH Faculty Resources, AY 2020-2021						
		FIRST DEGREE LEVEL			SECOND DEGREE LEVEL	ADDITIONAL FACULTY*
CONCENTRATION		PIF 1*	PIF 2*	FACULTY 3^	PIF 4*	
	DrPH					Non-PIF: 4 S. Malavé
Health Services Administration		Roberto Torres 1.0	José Pérez 1.0	Dharma Vázquez 1.0	NA	PIF: 1 J. Capriles
	MHSA					Non-PIF: 6 See Health Systems Analysis and Management
Industrial Hygiene		Lida Orta 1.0	Sergio Caporali 1.0	Aluisio Pimenta 1.0	NA	PIF: 0
	MS					Non-PIF: 1 See Environmental Health
Demography		Ana Luisa Dávila 1.0	Luz León 1.0	Hernando Mattei 1.0	NA	PIF: 0
	MS					Non-PIF: 1 V. De Jesús
Nutrition		Winna Rivera 1.0	Michael González 1.0	Mercedes Argüelles .5	NA	PIF: 0

TABLE C2.1.a. GSPH Faculty Resources, AY 2020-2021						
		FIRST DEGREE LEVEL			SECOND DEGREE LEVEL	ADDITIONAL FACULTY ⁺
CONCENTRATION		PIF 1*	PIF 2*	FACULTY 3^	PIF 4*	
	MS					Non-PIF: 2 M. Arguelles
Evaluation Research		Hector Colón 1.0	Carmen Albizu 1.0	Glorimar Caraballo .3	NA	PIF: 0
	MS					Non-PIF: 1
Non-Degree Certificate Programs		Ana Parrilla 1.0	Carol Salas 1.0			PIF: 0
	Maternal and Child Health / Developmental Disabilities					Non-PIF: 5
TOTALS:		Named PIF	40			
		Total PIF	50			
		Non-PIF	40			

- 2) Explain the method for calculating FTE for faculty in the templates and evidence of the calculation method's implementation. For schools only, all primary instructional faculty, by definition, are allocated 1.0 FTE. Schools must explain the method for calculating FTE for any non-primary instructional faculty presented in C2-1. Programs must present calculation methods for primary instructional and non-primary instructional faculty. (self-study document)**

All primary instructional faculty presented in **TABLE C2.1.a.** meet the requirements of the CEPH criteria: they are full-time GSPH employees, who as part of their regular responsibility, teach in the degree programs stated in the table. GSPH full-time faculty have 27 annual trimester credit hours (equivalent to 37.5 weekly hours) of academic responsibilities, which include teaching, research, and service activities.

The GSPH has two categories of non-primary faculty: (1) full-time employees of the MSC or the school who dedicate less than 50% effort in teaching at the school; or (2) part-time faculty that are not full-time employees of the MSC or the school. Non-primary faculty members at the GSPH are either faculty of other MSC schools or. Part-time adjunct faculty can be hired to: a) teach a course; or b) provide a reduced number of hours in all the school's scholarly activities, including research, service, and teaching. Part-time faculty are public health practitioners or area specialists hired after being evaluated for academic rank for an adjunct faculty position. The FTE is calculated as follows:

- Part-time adjunct faculty who only teach courses: FTE is calculated based on .037 faculty equivalency for each credit. In other words, 27 trimester credit hours is equivalent to 1 FTE.
- Faculty hired for a comprehensive scholarly workload: FTE is calculated as a proportion of a 37.5-hour effort per week.

- 3) If applicable, provide a narrative explanation that supplements reviewers' understanding of data in the templates. (self-study document)**

In **TABLE C2.1.a.** full-time faculty members were assigned to only one specialty/program according to their main contribution, responsibility, and area of expertise. However, many GSPH faculty members contribute to teaching in other academic programs through the core courses shared by all public health degrees (MPH core courses and DrPH core courses), co-teaching in some specialty courses, offering elective courses to students from other academic programs, and participating in integrative learning experiences and dissertation committees across programs. The MPH and DrPH degrees have a core curriculum across specialties which is a shared responsibility among programs. For this reason, faculty assigned to the Epidemiology Program, for example, teach courses to all GSPH students.

Full-time faculty members in non-public health degree programs (by CEPH's definition) are also represented in **TABLE C2.1.a.** by their primary instructional responsibility to present the GSPH's full complement of faculty. Non-public health degree program faculty members contribute to public health degrees through required courses for concentration areas, elective courses available to all public health degree students, and their

participation in integrative learning experiences and thesis committees of public health degree students. For example, faculty members of the Master in Science in Industrial Hygiene Program serve as dissertation advisors and committee members for doctoral students in the DrPH Environmental Health Concentration program. Similarly, faculty from the MHSA Program contribute by teaching core and specialty courses and participating in dissertation committees of DrPH students in the Health Systems Analysis and Management concentration.

All Non-Primary Faculty numbers in **TABLE C2.1.a.** are reported in Criteria E1 and have been involved in teaching or supervision of required courses (i.e., dissertations) during AY 2020-2021.

- 4) Data on the following for the most recent year in the format of Template C2-2. See Template C2-2 for additional definitions and parameters.

TABLE C2.4.a GSPH Advising Ratios, AY 2020-2021			
General advising & career counseling ¹			
Degree level	Average	Min	Max
Master's	7.16	2	48
Doctoral	3.73	1	19
Advising in MPH integrative experience ²			
Degree	Average	Min	Max
MPH	7.58	4	16
Mentoring/primary advising on thesis, dissertation or DrPH integrative project ³			
Degree Level	Average	Min	Max
DrPH	2.2	1	7
Master's other than MPH	2.16	1	2
¹ General Advisors assigned at beginning of AY 2020-21			
² Based on students enrolled in MPH integrative experience courses during AY 2020-21			
³ Based on faculty thesis or dissertation course sections during AY 2020-21			

5) Quantitative data on student perceptions of the following for the most recent year:

a) Class size and its relation to quality of learning (eg, The class size was conducive to my learning)

TABLE C2.5.a. GSPH Student Satisfaction with Class Size, AY 2017-18 to 2019-2020						
Students who reported being “Very Satisfied” and “Satisfied” with Class Size for their learning process.						
Degree Program	2017-18		2018-19		2019-20	
	%	N	%	N	%	N
DrPH	100	5	100	3	100	5
MS	80	5	100	8	100	17
MPH	80	26	85	19	94	51
MHSA	43	7	100	3	100	16
All Students	78	52	90.8	58	96	78
Exit Interview Reports available in Electronic Resource File C2.5.						

b) Availability of faculty (ie, Likert scale of 1-5, with 5 as very satisfied)

Table C2.5.b. GSPH Student Satisfaction with Availability of Faculty AY 2017-18 to 2019-20							
Students who Reported that they “Completely Agreed” or “Agreed” with the statement: “Faculty were available to address student issues”.							
Degree Program	2017-18		2018-19		2019-20		
	%	N	%	N	%	N	
DrPH Programs							
Core Courses Faculty	100	5	100	3	100	5	
Specialty Courses Faculty	100	5	100	3	100	5	
MS Programs							
Core Courses Faculty	100	5	87.5	8	88	17	
Specialty Courses Faculty	100	5	100	8	82	17	
MPH Programs							
Core Courses Faculty	88	26	84.4	19	98	51	
Specialty Courses Faculty	89	26	95	19	88	51	
MHSA Program							
Core Courses Faculty	72	7	100	3	100	13	
Specialty Courses Faculty	57	7	67	3	100	13	
All Programs							
Core Courses Faculty	88	47	71.1	45	90	78	
Specialty Courses Faculty	88	48	91.5	47	97	78	
Exit Interview Reports available in Electronic Resource File C2.5.							

6) Qualitative data on student perceptions of class size and availability of faculty. Schools should only present data on public health degrees and concentrations. (summary in self-study and full results/backup documentation in electronic resource file)

Qualitative data is collected in the exit interview survey which includes space for students to provide comments and explanations of their responses, or to share any additional information. The qualitative data is included in the exit interview reports available in **Electronic Resource File C2.5**. Student comments are grouped by survey category, such as: “Student Experience”, “Academic Advising”, and “University Environment”, among others. Most participants in the exit interview surveys did not leave comments.

The qualitative information was reviewed for exit interview data for AY 2017-18 to AY 2019-20. During this period there were no comments about class size in the data. This issue has never been brought up by students through the GSPH Student Council or in class evaluations. Qualitative data about faculty availability was identified in student comments on the exit interview. Some comments were related to positive experiences which included support and availability of their mentors or professors. Besides this positive feedback, only 12 comments across the three years of exit interviews addressed issues of faculty availability. These comments are summarized as follows:

- Academic Advising: (1) Not knowing or being sure who their academic advisor was or not receiving academic advising; (2) not receiving enough information about academic progress; (3) Recommendations to improve communication channels between the department and the Dean’s Office to keep students informed of academic processes.
- Department Chair and/or Program Coordinators: (1) Not responsive or available to attend to student needs in a timely manner; (2) Observation that faculty members in these positions are too busy to provide follow-up and advising with the recommendation that coordinators have a lighter academic load to better attend to student needs.

It is important to note that the GSPH enacted an academic advising policy recently to address these issues by unifying guidelines and expectations across all GSPH academic programs with appropriate monitoring mechanisms.

7) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The GSPH complies with the number of primary instructional faculty required by CEPH. It has sufficient and qualified faculty to fulfill the School’s mission and goals, including advising students.
- In general, students are satisfied with their class sizes, and perceive that faculty are available to address any issues students may have.

Weaknesses

- Student perception data comes from a relatively small number of students responding to the exit interview, which may lead to conclusions that may not truly represent the entire student body.

- The qualitative data available from Exit Interviews is limited. Exit interview questionnaire has been revised with the inclusion of qualitative questions to gather better and more diverse qualitative data.
- Fiscal measures can have an impact on the number of faculty in the school and faculty near retirement is a concern.
- Budget cuts have not allowed the GSPH to replace all the faculty who have retired and may also affect replacement of faculty members near retirement.

Lessons Learned

- The School needs to identify alternative methods for collecting qualitative data from students. The time and administration method of GSPH Exit Interview is under review to ensure higher response rates so that perception data obtained is more accurate and informative.
- During the next two academic years, the GSPH will document and evaluate the implementation of the recently approved “Policy on Academic Advising and Monitoring of Student Academic Progress” which establishes a uniform advising system throughout all academic programs.
- The School should develop and implement a faculty succession plan to maintain the adequacy and quality of its complement of faculty.

C3. STAFF AND OTHER PERSONNEL RESOURCES

The school or program has staff and other personnel adequate to fulfill its stated mission and goals. The stability of resources is a factor in evaluating resource adequacy. “Staff” are defined as individuals who do not have faculty appointments and for whom staff work is their primary function. “Other personnel” includes students who perform work that supports the program’s instructional and administrative needs (eg, individuals who enroll first as students and then obtain graduate assistant or other positions at the university are classified as “other personnel,” while individuals hired into staff positions who later opt to complete coursework or degrees are classified as “staff”).

- 1) A table defining the number of the school or program’s staff support for the year in which the site visit will take place by role or function in the format of Template C3-1. Designate any staff resources that are shared with other units outside the unit of accreditation. (self-study document)

TABLE C3.1.a GSPH Staff Support, AY 2020-2021		
Role/Function		FTE ¹ 72
Administrative Assistants		16
	<i>Academic Departments and Programs</i>	7
	<i>Deanship²</i>	5
	<i>Service projects or programs</i>	3
	<i>Research projects or programs</i>	1
Administrators		4
	<i>Deanship²</i>	1
	<i>Service projects or programs</i>	3
Student Support Staff		2
Human resources		1
	<i>Deanship²</i>	1
Information Technology		1
	<i>Deanship²</i>	1
Research Implementation³		13
Service Implementation³		37
Non institutional		0
TOTAL STAFF		74
¹ FTE in the GSPH is based on a 37.5 hour work week. ² Deanship refers to all administrative units including Office of the Dean, Associate Dean, Assistant Dean of Student Affairs, and Office of Administration. ³ Research and Service Implementation categories refer to support staff hired for specific research/service program/project implementation activities. This includes Project Coordinators, Educators, Research Assistants, among others. NOTE: Faculty members may have academic administration functions but are not included in the table. For example, program coordinators are faculty of the program. The Curriculum Specialist is also a faculty member and is not included in the table.		

2) Provide a narrative description, which may be supported by data if applicable, of the contributions of other personnel. (self-study document)

Each academic department has at least one administrative assistant who supports students, faculty, program coordinators and the department Chairpersons. They address administrative issues, coordinate meetings with faculty members, provide orientations on administrative and academic processes, and provide referrals to other offices and services as needed, among other support activities. Administrative assistants also assist program coordinators and department chairpersons with administrative and academic processes. Some service and research centers and projects have dedicated administrative assistants and other support staff assigned. Student Support staff refers to the Assistant Dean of Student Affairs and the Professional Counselor who are charged with handling student issues and supporting student organizations and academic programs during the admissions process.

All administrative procedures end up in the Dean's Administration Office. The GSPH has one administrator who is responsible for all administrative processes, such as requisitions, physical resource management, and budget and contract processes. The administrator is supported by two administrative assistants, each with responsibilities in an administration area, and one human resources staff. The Dean's Administration Office handles all GSPH's administrative procedures with the assistance of department administrative assistants when these processes begin at the program or department level. The Office of the Dean has three other administrative assistants, one assigned directly to the Dean, one to the Assistant Dean of Student Affairs and the other to the Associate Dean of Academic Affairs. The GSPH has one information technology support staff person who is supported on certain issues by the MSC Office of Information Systems. The school also has research and service staff who are primarily dedicated to grant-funded activities or financially self-sustaining activities such as the Continuing Education Division (DECEP).

3) Provide narrative and/or data that support the assertion that the school or program's staff and other personnel support is sufficient or not sufficient. (self-study document)

Support staff positions have been reduced in the GSPH during the past five years because of fiscal measures undertaken by the UPR. The School has adapted and identified alternative measures to strengthen staff support. Despite these recent setbacks, the GSPH's staff has been sufficient to support the administrative and academic operations, as well as the school's mission.

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- It must be highlighted that the GSPH administration staff executes its work with the utmost degree of effectiveness and efficiency.

Weaknesses

- Reduction in staff permanent positions make it harder to fill staff positions and may trigger turnover. In particular, the Curriculum and Evaluation Office staff needs to be strengthened.

Lessons Learned

- Due to reductions in administrative staff permanent positions, the GSPH administration has implemented strategies like retraining staff, cross training and redistributing personnel.

C4. PHYSICAL RESOURCES

The school or program has physical resources adequate to fulfill its stated mission and goals and to support instructional programs. Physical resources include faculty and staff office space, classroom space, student shared space and laboratories, as applicable.

1) Briefly describe, with data as applicable, the following. (Note: square footage is not required unless specifically relevant to the school or program's narrative.)

The Graduate School of Public Health's headquarters is on the fourth floor of the UPR-MSU main building (named the Dr. Guillermo Arbona building). The total space is 45,533 square feet distributed into faculty offices, classrooms, computer facilities, laboratories, administrative offices, research and service space and common areas.

a. Faculty Office Space

The faculty office space is mainly located within each of the school's five departments: Health Services Administration, Biostatistics and Epidemiology, Social Sciences, Human Development and Environmental Health. The GSPH has 73 faculty offices, which range from 55 to 141 square feet. All faculty members have assigned office space equipped with Wi-Fi access, Ethernet connection, desktop computer, printer, and office furniture.

b. Staff office space

The staff office space includes the GSPH Dean's Office (with 10 staff offices) which includes the Associate Dean's Office, administration staff, the Curriculum and Evaluation Office, and three reception areas with support personnel which accounts for a total of 2,422 square feet (including the Dean's conference room). The school also has the Student Affairs Office area for the Assistant Dean of Student Affairs and the professional counselor which has a reception area with a total of 893 square feet. The GSPH has assigned space for research and service projects and their staff which accounts for approximately 7,916 square feet. This includes offices, common work areas with cubicle space, conference rooms and storage areas. In addition, there are two conference rooms for faculty and staff meetings. Staff offices and spaces are equipped with office furniture, computers, printers, scanners and any other equipment needed to fulfill their roles in the school.

c. Classrooms

The classrooms represents the largest school spaces dedicated to teaching. There are 10 classrooms distributed throughout the school. In addition, there are five departmental conference rooms that are often used as classrooms for small class sized seminar courses. All classrooms have the necessary computers and software, standardized video conferencing equipment, smartboards, and Wi-Fi hot spots to facilitate instruction activities.

d. Shared Student space

The shared student space at the GSPH includes a student lounge, which is used for small group study sessions and an open wall Wi-Fi Zone with study workstations for a capacity of 10 students. There is plenty of shared and common space in the school's hallways for students to set up special activities, such as public health exhibitions, fund raisings for student associations, and public health promotion efforts. In addition, the MSC has plenty of shared space, including a Student Center with various services including areas for eating meals and a physical fitness area. The Conrado Asenjo Library is another important shared campus space for GSPH students, mainly for studying and research purposes.

e. Laboratories

The GSPH has three computer centers that are used for teaching and are also available for students when classes are not scheduled. Doctoral students also have a specific space assigned to them with four study stations each equipped with a computer. The Department of Environmental Health has two laboratory facilities, one with 939 square feet and the other with 581 square feet. These laboratories are equipped with instruments and materials needed for research and measurement of environmental parameters for water, air, soil, and food samples using chemical-physical and microbiological methods. The laboratory equipment available includes two gas chromatographs, four spectrophotometers, one microwave oven, one Microtox analyzer, four microbiology incubators, one biological hood and two chemical hoods, one total organic carbon analyzer, two Andersen cascade impactors, two membrane filtration systems, one water purification system, and portable field equipment. In addition to these school laboratory facilities, the MSC Environmental Research Center laboratories and equipment, located on the second floor of the UPR-MSU main building, and the Interdisciplinary Laboratories on the sixth floor are also available to support GSPH student and faculty research. Occasionally, specialized laboratories in government and private agencies may offer their facilities for faculty and students assigned to specific projects through collaborative agreements.

2) Provide narrative and/or data that support the assertion that the physical space is sufficient or not sufficient. (self-study document)

The GSPH is accredited by multiple accreditation institutions such as MSCHE, CEPH and CAHME among others. For the past 20 years the school has been reaccredited with a positive certification that it complies with sufficient physical space to meet its mission and goals. Moreover, limitations of school space have never been an issue identified in student evaluations. The GSPH has sufficient space to accommodate offices for all faculty and administrative personnel, classrooms to schedule all courses which is facilitated by the division of students between day and evening programs, and space dedicated to staff, research and service activities.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The GSPH's physical space has been improved and renovated in some areas over the past five years.
- As part of the MSC, GSPH's students and faculty are able to use Campus-wide facilities for large activities (such as the MSC amphitheater). Students have ample space for study in the MSC student center and library facilities.

Weaknesses

- The GSPH needs a more efficient physical resources management system for decision making and the continuous monitoring of physical resources in order to optimize its potential.

Lessons Learned

- Considering the adverse environment of catastrophic events that the GSPH endured in the last 4 years (including Hurricane Maria damage to facilities), the GSPH has learned to manage and maximize its physical resources during times of crisis.

C5. INFORMATION AND TECHNOLOGY RESOURCES

The school or program has information and technology resources adequate to fulfill its stated mission and goals and to support instructional programs. Information and technology resources include library resources, student access to hardware and software (including access to specific software or other technology required for instructional programs), faculty access to hardware and software (including access to specific software required for the instructional programs offered) and technical assistance for students and faculty.

1) Briefly describe, with data if applicable, the following:

The Medical Sciences Campus is committed to developing and maintaining its technology infrastructure to support its mission in teaching, service, and research, and its administrative processes. Technology infrastructure consists of a centrally supported digital network that supports high speed data communications within the UPR System and between the campus schools. The information and technology system integration on campus has evolved to be more efficient and distributed, able to incorporate new technologies and systems from the UPR Central Administration. The implementation of a new electronic system was completed recently to enable access to services through Internet browsers, in which students can see all the courses they are enrolled in, access their grades, and carry out the financial aid process.

The MSC Information Systems Office (OSI, for its Spanish acronym) is responsible for the operation, maintenance, and security of the campus networks, and adequately safeguards confidentiality, reliability, availability, and integrity of the information system. OSI oversees coordinating and communicating core technology that supports all MSC schools and programs.

Recent improvements in IT include a redesign of the main MSC backbone network to support 10Gibts interconnection between buildings and the MSC Datacenter. The OSI upgraded MCScore router, firewalls, and the core switch to support 10Gbitbs connections which improved user experiences through high bandwidth-oriented applications, including video conference and external MSC networks services, such as Cloud-based Learning Management Systems. Some of the main improvements have been that all schools have the necessary computers and software, standardized video conferencing equipment, electronic classrooms, wired and/or wireless environments, and mobile stations shared by departments and units. The UPR uses Microsoft Teams, Outlook and Office 365 for Education, comprised of cloud computing, productivity, and collaboration tools that provide a uniform platform for students, faculty, and employees. This suite of cloud computing services provides better communication channels, video conference tools, and shared space for collaborations. The UPR has also updated its administrative computer systems in a network comprising all eleven UPR campuses and the Central Administration. The system uses the Oracle eBusiness Suite and provides an integrated solution that allows the UPR to unify its financial, and almost all its human resources systems. The MSC continues to improve its technology infrastructure and resources to ensure it can effectively carry out the its teaching, services, and research mission.

a. library resources and support available for students and faculty.

The Conrado F. Asenjo Library offers the most comprehensive collection of bibliographical health science resources in the Caribbean. The Library serves the campus community, practicing health professionals, and the community at large. The Library consists of the following sections: Administrative Office, Circulation and

Reserve, Reference, Collection Development and Administration, Serials, Special Collections (Puerto Rican, History of Medicine, and Bailey K. Ashford Collections), Center for Audiovisual Resources, and the Historical Archives. The collection comprises 29,673 print book titles and 83,950 electronic book titles; 1,989 active journal subscriptions covering the fields offered by the MSC academic programs. The Library has access to 72,219 electronic journal titles through databases such as ClinicalKey, Science Direct, Scopus, EBSCOHost, ProQuest, Ovid, and other resources, such as Micromedex and Infotrac Encyclopedias and databases, and full access to the National Library of Medicine products. Remote and local access to the library databases is available to faculty, students, and staff by means of OpenAthens. Interlibrary loans and document delivery service is available to borrow physical books or receive electronic documents from other libraries.

Library access for students includes a Wi-Fi environment, end-user bibliographical search areas equipped with personal computers in the Circulation Section and 6th floor with internet. Other access services include interlibrary loans and document delivery. The Reference Section offers a strong information literacy program in collaboration with professors from the campus schools that formally integrate the teaching of information skills into courses. As a result, these activities are integrated into course syllabi. Besides participating in formal courses, reference librarians also offer workshops and individual training in the use of library resources. Reference services are also offered online through the Virtual Reference service, typically using an online form, and replying in 24 hours or less. During Covid-19 restrictions, the Library has been able to activate LibChat, a chat service, with fellow librarians from other sections of the library, which operates from Monday to Friday, 7am to 6pm. Also available on the library's webpage is LibGuides, a content management system used to create subject specific resources on topics from writing styles, strategically effective searches and how to use library's databases.

Library technical assistance includes six professional librarians who hold academic rank and 12 nonteaching staff members. Library faculty members participate in teaching, the campus Academic Senate, institutional committees, and accreditation processes. As a Resource Library of the National Network of Libraries of Medicine (NNLM) of the National Library of Medicine (NLM), the Library participates in the network's document delivery program. It is also a member of the Consortium of Southern Biomedical Libraries (CONBLS). Through these programs, materials that are not available in the collection are obtained from other health science libraries using interlibrary loans. Besides the NNLM/NLM collaborative agreements, the library has established arrangements with other units of the UPR Library System.

b. student access to hardware and software (including access to specific software or other technology required for instructional programs)

Students have access to computers through the GSPH's three computer centers and the MSC library shared spaces. The UPR offers all enrolled students access to a subscription of the Microsoft 365 Suite that students can install in up to four personal computers and devices. Students also have access to data analysis software, such as SPSS, STATA, GIS, SAS through the school's computer centers. During covid pandemic in-person restrictions the GSPH acquired remote access licenses to SPSS, STATA and GIS so that students can work from their own computers at their homes.

c. faculty access to hardware and software (including access to specific software or other technology required for instructional programs)

Each faculty member has an up-to-date desktop computer with the corresponding licensed application software required for their teaching, service, and research activities. Faculty also have printer and scanner access as part of their office equipment or in the departmental administrative support areas. Faculty also have access to copiers available in each department and a school copy room for more intensive photocopying needs. As a result of covid restrictions for in-person teaching, access to online software suites and applications have been strengthened. The MSC provides access to other software programs for online instruction, such as the Moodle and Blackboard Ultra learning management systems and Respondus Lockdown Browser. The RCM Online Division provides faculty with training for the use of these program.

d. technical assistance available for students and faculty

The MSC has the Office of Information Systems (OSI – acronym in Spanish) which is charged with providing access to information technology resources and facilitating its integration and use in academic activities. OSI manages access issues into the various systems, such as the student and administrative systems, and provide support for faculty and students. OSI support can be obtained through the Electronic Support System available through the MSC website. Alternatively support is available through e-mail, phone, an personally in the office located in the 2nd Floor of the main Medical Sciences Campus building. Office hours are from 8:30am to 4:00pm. The GSPH has one information technology support staff as a permanent on-site computer technician to support all teaching and administrative personnel. GSPH IT specialist is available in the Office of the Dean for faculty staff and students from 8:30am to 4:30pm. The school's IT specialist also provides support through e-mail, as is the case with software license requests for faculty and students.

2) Provide narrative and/or data that support the assertion that information and technology resources are sufficient or not sufficient. (self-study document)

The GSPH has sufficient information and technology resources to fulfill its mission and objectives. During the past five years, the MSC and the GSPH have invested in strengthening information technology resources available to all academic sectors, students, faculty, and staff. The GSPH has also invested in technology resources renovating 30% of its classrooms with the latest technology to facilitate instruction. The MSC and the school have invested in systems that allow remote access of library resources and software programs (such as data analysis software) for students and faculty which provide more flexibility and accessibility. Students and faculty are also able to carry out many student processes and can stay connected and informed from anywhere with the integration of the UPR systems with internet browser access. However, it must be acknowledged that not all our students are able to take advantage of these possibilities given that some have personal technological and internet access challenges at home. Therefore, physical access to the MSC and GSPH is still an important consideration to ensure equitable access among our diverse student population.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The MSC and the GSPH has implemented modern and adequate hardware and software technology on the internet, intranet, and workstation levels so that faculty, students, and support personnel can easily interact to accomplish the institutional mission.

Weaknesses

- The GSPH needs additional and more frequent information technology training, especially for students, faculty, and support personnel.
- Some segments of our diverse student population do not have the same level of access to information and technology resources. Experience with Distance Learning during COVID-19 has demonstrated that for many of our students having stable internet and computer access at home can be a major challenge.
- As the importance and complexity of information systems have increases the GSPH needs to strengthen its information technology support staff.

Lessons Learned

- In the last four years the GSPH has taken on the task of providing training in varied skills in information technology to students, faculty and non-faculty employees. A consistent information technology training plan is important to continue and further these initiatives.

D1. MPH FOUNDATIONAL PUBLIC HEALTH KNOWLEDGE

The school or program ensures that all MPH and DrPH graduates are grounded in foundational public health knowledge. Grounding in foundational public health knowledge is measured by the student's achievement of the learning objectives, or higher-level versions of the same objectives.

- 1) Provide a matrix, in the format of Template D1-1, that indicates how all MPH and DrPH students are grounded in each of the defined foundational public health learning objectives (1-12). The matrix must identify all options for MPH and DrPH students used by the school or program. (self-study document)**

All Master's Degree students (both in MPH and MS programs) have as part of their required curriculum the "SALP 6006: Introduction to Public Health" course. This course covers all foundational public health knowledge (see Table D1.1a). This is the first course that all students in the GSPH take and provides a broad foundation for the rest of the curriculum.

For DrPH students foundational public health knowledge is a pre-requisite for admission. Students have to either have an MPH from a CEPH accredited program or school, or must provide evidence of having taken a biostatistics, epidemiology and introduction to public health course that covers all foundational knowledge. If DrPH applicants have not taken an introduction to public health course with coverage of the foundational knowledge areas then they must take "SALP 6006: Introduction to Public Health" before beginning their studies at the GSPH. Furthermore, the public health foundational knowledge areas are reinforced in the "SALP 8026 Public Health Leader as Educator" course which is a requirement for all DrPH students. In this course DrPH students serve as facilitators for the "SALP 6006: Introduction to Public Health" case study offered to master's students, under faculty supervision, and learn and apply pedagogical skills. In order to prepare their pedagogical interventions in the course they must review the foundational knowledge areas of the course to be able to teach them effectively. This reinforces public health foundational knowledge mastery in DrPH students.

TABLE D1.1.a Foundational Knowledge Content Coverage for MPH	
Content	Course number(s) & name(s) or other educational requirements
1. Explain public health history, philosophy and values	SALP 6006 - Introduction to Public Health
2. Identify the core functions of public health and the 10 Essential Services*	SALP 6006 - Introduction to Public Health
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	SALP 6006 - Introduction to Public Health
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	SALP 6006 - Introduction to Public Health

TABLE D1.1.a Foundational Knowledge Content Coverage for MPH	
Content	Course number(s) & name(s) or other educational requirements
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	SALP 6006 - Introduction to Public Health
6. Explain the critical importance of evidence in advancing public health knowledge	SALP 6006 - Introduction to Public Health
7. Explain effects of environmental factors on a population's health	SALP 6006 - Introduction to Public Health
8. Explain biological and genetic factors that affect a population's health	SALP 6006 - Introduction to Public Health
9. Explain behavioral and psychological factors that affect a population's health	SALP 6006 - Introduction to Public Health
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities	SALP 6006 - Introduction to Public Health
11. Explain how globalization affects global burdens of disease	SALP 6006 - Introduction to Public Health
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)	SALP 6006 - Introduction to Public Health

TABLE D1.1.b Foundational Knowledge Content Coverage for DRPH	
Content	Course number(s) & name(s) or other educational requirements
1. Explain public health history, philosophy and values	Requirements for admission: Each applicant must meet the general Public Health doctoral program requirements and must possess a master's degree from a CEPH accredited public health program or school. Applicants with master's degree in other disciplines, or with a doctorate, whether professional or academic, such as MD, JD, DMD, PharmD, PhD or others may be considered for admission even if they do not have a master in public health. If the applicant does not hold a degree in Public Health, prior to admission to the program he/she must complete, a course in statistics or biostatistics, epidemiology and the SALP 6006 introductory public health course or its equivalent at the graduate
2. Identify the core functions of public health and the 10 Essential Services*	
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	
5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.	
6. Explain the critical importance of evidence in advancing public health knowledge	
7. Explain effects of environmental factors on a population's health	

TABLE D1.1.b Foundational Knowledge Content Coverage for DRPH	
Content	Course number(s) & name(s) or other educational requirements
8. Explain biological and genetic factors that affect a population's health	level prior to admission. Applicants must also have approved the courses with A or B. https://sp.rcm.upr.edu/asuntos-academicos/programas-academicos/doctorado-en-salud-publica-con-especialidad-en-analisis-de-sistemas-de-salud-y-gerencia-drph-hsam/
9. Explain behavioral and psychological factors that affect a population's health	
10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities	
11. Explain how globalization affects global burdens of disease	
12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)	https://sp.rcm.upr.edu/asuntos-academicos/programas-academicos/doctorado-en-salud-publica-drph-con-especialidad-en-determinantes-sociales-de-la-salud/ https://sp.rcm.upr.edu/asuntos-academicos/programas-academicos/doctorado-en-salud-publica-drph-con-especialidad-en-salud-ambiental/

- 2) Document the methods described above. This documentation must include all referenced syllabi, samples of tests or other assessments and web links or handbook excerpts that describe admissions prerequisites, as applicable. (electronic resource file)

Table D1.2 shows the assessment activity for each foundational public health learning objectives listed above (1-12). Course syllabus, instructions, rubrics, and examples included in **Electronic Resource File D1**.

TABLE D1.2.a SALP 6006 - Introduction to Public Health-Assessment of Foundational Public Health Learning Objectives

Foundational PH Learning Objectives	Course and description of the specific assessment opportunity
1. Explain public health history, philosophy and values.	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam.
2. Identify the core functions of public health and the 10 Essential Services.	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam.
3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam.
4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics).

TABLE D1.2.a SALP 6006 - Introduction to Public Health-Assessment of Foundational Public Health Learning Objectives

Foundational PH Learning Objectives	Course and description of the specific assessment opportunity
<p>5. Discuss the science of primary, secondary, and tertiary prevention in population health, including health promotion, screening, etc.</p>	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics).</p>
<p>6. Explain the critical importance of evidence in advancing public health knowledge.</p>	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study</p>

TABLE D1.2.a SALP 6006 - Introduction to Public Health-Assessment of Foundational Public Health Learning Objectives

Foundational PH Learning Objectives	Course and description of the specific assessment opportunity
	instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics).
7. Explain effects of environmental factors on a population's health.	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics).
8. Explain biological and genetic factors that affect a population's health	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and

TABLE D1.2.a SALP 6006 - Introduction to Public Health-Assessment of Foundational Public Health Learning Objectives

Foundational PH Learning Objectives	Course and description of the specific assessment opportunity
	<p>preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics).</p>
<p>9. Explain behavioral and psychological factors that affect a population's health</p>	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics).</p>

TABLE D1.2.a SALP 6006 - Introduction to Public Health-Assessment of Foundational Public Health Learning Objectives

Foundational PH Learning Objectives	Course and description of the specific assessment opportunity
<p>10. Explain the social, political, and economic determinants of health and how they contribute to population health and health inequities.</p>	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics).</p>
<p>11. Explain how globalization affects global burdens of disease.</p>	<p><u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam.</p>
<p>12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health).</p>	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion</p>

TABLE D1.2.a SALP 6006 - Introduction to Public Health-Assessment of Foundational Public Health Learning Objectives

Foundational PH Learning Objectives	Course and description of the specific assessment opportunity
	<p>strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics).</p>

3) If applicable, assessment of strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The SALP 6006 - Introduction to Public Health course is required for all students entering the GSPH. Students are exposed to the fundamentals of Public Health through the content and learning activities of the course, which allow them to develop the integration and application of knowledge. In the course, the importance of interdisciplinary collaborative work is promoted from the beginning, which allows students to acquire a broad vision of public health to evaluate public health issues. It also provides unique opportunities for students to understand and analyze the strengths and challenges in the PR health system.

Weaknesses

- Implementation of the new curriculum is recent and is still under constant assessment procedures to make adjustments.

Lessons Learned

- Our commitment is to complete the integration and alignment of the new curriculum reflecting the broad spectrum of the new competencies among our graduate students. Recent extreme events (hurricanes, political disruptions, bankruptcy, earthquakes, COVID-19) have led us as a school of Public Health to adopt multiple coping strategies, such as teaching in hybrid modalities, online and face-to-face (when possible), to provide continuity of services among our students. This has made us to implement online procedures that address the new reality we were facing. However, we have maintained the quality of teaching, and, in the process, and students have continued to develop their competencies in Public Health.
- These scenarios have taught us to develop adaptive capacity in cases of uncertainty

D2. MPH FOUNDATIONAL COMPETENCIES

The school or program documents at least one specific, required assessment activity (eg. component of existing course, paper, presentation, test) for each competency below, during which faculty or other qualified individuals (eg, preceptors) validate the student's ability to perform the competency. Assessment opportunities may occur in foundational courses that are common to all students, in courses that are required for a concentration or in other educational requirements outside of designated coursework, but the school or program must assess all MPH students, at least once, on each competency. Assessment may occur in simulations, group projects, presentations, written products, etc. This requirement also applies to students completing an MPH in combination with another degree (eg, joint, dual, concurrent degrees). For combined degree students, assessment may take place in either degree program. These competencies are informed by the traditional public health core knowledge areas, (biostatistics, epidemiology, social and behavioral sciences, health services administration and environmental health sciences), as well as cross-cutting and emerging public health areas.

- 1) List the coursework and other learning experiences required for the school or program's MPH degrees, including the required curriculum for each concentration and combined degree option. Information may be provided in the format of Template D2-1 or in hyperlinks to student handbooks or webpages, but the documentation must present a clear depiction of the requirements for each MPH degree. (self-study document)

TABLE D2.1.a. MPH-General Option Curriculum	
CURRICULUM	Credits
<i>CORE</i>	
SALP 6006 Introduction to Public Health	3
ADSS 6516 Fundamentals of Health Policy and Management in Public Health	4
BIOE 6525 Statistical Analysis	5
CISO 6546 Social Determinants and Equity in Public Health	3
EPID 6523 Epidemiological Methodology	4
ADSS 6594 Public Health Program Planning and Evaluation	4
SAAM 6528 Principles of Environmental Public Health	3
SALP 6250 Applied Public Health Research Methods	3
SALP 6251 Leadership in Public Health	2
INTD 6996 Interprofessional Collaborative Practice in Public Health	0 (12 hours)
<i>SPECIALTY</i>	
ADSS 6555 Legislative Process for Public Health Professionals	3
ADSS 6621 Financial Resources Management for Public Health Organizations	3
ADSS 6584 Health Politics and Policy	3
SALP 6005 Foundations of Health Promotion	3
ADSS 6620 Advanced Public Health Policy Analysis	3
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	

TABLE D2.1.a. MPH-General Option Curriculum	
CURRICULUM	Credits
SALP 6997 Integrative Experience in General Public Health	5
SALP 6995 Applied Practice Experience: General Public Health	1
<i>ELECTIVES</i>	
Electives	3
TOTAL	55 + 12 hours

TABLE D2.1.b MPH-Epidemiology Curriculum	
CURRICULUM	Credits
<i>CORE</i>	
SALP 6006 Introduction to Public Health	3
ADSS 6516 Fundamentals of Health Policy and Management in Public Health	4
BIOE 6525 Statistical Analysis	5
CISO 6546 Social Determinants and Equity in Public Health	3
EPID 6523 Epidemiological Methodology	4
ADSS 6594 Public Health Program Planning and Evaluation	4
SAAM 6528 Principles of Environmental Public Health	3
SALP 6250 Applied Public Health Research Methods	3
SALP 6251 Leadership in Public Health	2
INTD 6996 Interprofessional Collaborative Practice in Public Health	0 (12 hours)
<i>SPECIALTY</i>	
EPID 6528 Epidemiology of Mental Disorders	3
EPID 6529 Epidemiology of Chronic Diseases	3
BIOE 6526 Applied Statistics Methods in Epidemiology	2
EPID 6535 Epidemiology of Infectious Diseases	4
EPID 6536 Epidemiology and Pathogenesis of Cancer	3
EPID 6527 Public Health Surveillance	2
EPID 6524 Community Health Needs Assessment	2
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
SALP 6999 Capstone Project in Public Health: Epidemiology and Biostatistics	5
EPID 6995 Applied Practice Experience: Epidemiology and Biostatistics	1
TOTAL	56 + 12 hours

TABLE D2.1.c MPH- Biostatistics Curriculum	
CURRICULUM	Credits
<i>CORE</i>	
SALP 6006 Introduction to Public Health	3
ADSS 6516 Fundamentals of Health Policy and Management in Public Health	4
BIOE 6525 Statistical Analysis	5
CISO 6546 Social Determinants and Equity in Public Health	3
EPID 6523 Epidemiological Methodology	4
ADSS 6594 Public Health Program Planning and Evaluation	4
SAAM 6528 Principles of Environmental Public Health	3
SALP 6250 Applied Public Health Research Methods	3
SALP 6251 Leadership in Public Health	2
INTD 6996 Interprofessional Collaborative Practice in Public Health	0 (12 hours)
<i>SPECIALTY</i>	
BIOE 6535 Statistical Inference	4
BIOE 6537 Non-Parametric Statistical Inference	3
BIOE 6545 Introduction to Sampling Theory	3
BIOE 6555 Regression and Correlation Analysis	3
BIOE 6605 Statistical Computing Applied to Public Health	4
EPID 6524 Community Health Needs Assessment	2
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
SALP 6999 Capstone Project in Public Health: Epidemiology and Biostatistics	5
EPID 6995 Applied Practice Experience: Epidemiology and Biostatistics	1
TOTAL	56 + 12 hours

TABLE D2.1.d MPH- Environmental Health Curriculum	
CURRICULUM	Credits
<i>CORE</i>	
SALP 6006 Introduction to Public Health	3
ADSS 6516 Fundamentals of Health Policy and Management in Public Health	4
BIOE 6525 Statistical Analysis	5
CISO 6546 Social Determinants and Equity in Public Health	3
EPID 6523 Epidemiological Methodology	4
ADSS 6594 Public Health Program Planning and Evaluation	4
SAAM 6528 Principles of Environmental Public Health	3
SALP 6250 Applied Public Health Research Methods	3
SALP 6251 Leadership in Public Health	2
INTD 6996 Interprofessional Collaborative Practice in Public Health	0 (12 hours)
<i>SPECIALTY</i>	
SAAM 6531 Aquatic Systems and Public Health	3
SAAM 6534 Air Pollution and Public Health	3
SAAM 6535 Environmental Toxicology	3
SAAM 6541 Environmental Legislation	3
SAAM 6545 Food Safety	3
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
SAAM 6999 Capstone Project in Public Health: Environmental Health	3
SAAM 6995 Applied Practice Experience: Environmental Health	3
<i>ELECTIVES</i>	
Electives	6
TOTAL	58 + 12 hours

TABLE D2.1.e MPH-Gerontology Curriculum	
CURRICULUM	Credits
<i>CORE</i>	
SALP 6006 Introduction to Public Health	3
ADSS 6516 Fundamentals of Health Policy and Management in Public Health	4
BIOE 6525 Statistical Analysis	5
CISO 6546 Social Determinants and Equity in Public Health	3
EPID 6523 Epidemiological Methodology	4
ADSS 6594 Public Health Program Planning and Evaluation	4
SAAM 6528 Principles of Environmental Public Health	3
SALP 6250 Applied Public Health Research Methods	3
SALP 6251 Leadership in Public Health	2
INTD 6996 Interprofessional Collaborative Practice in Public Health	0 (12 hours)
<i>SPECIALTY</i>	
GERO 6005 Introductory Seminar in Gerontology	1
GERO 6501 Biological Aspects of Aging	3
GERO 6503 Psychological Aspects of Aging	3
GERO 6505 Clinical Aspects of Aging	3
GERO 6507 Social Aspects of Aging	3
GERO 6509 Policy and Management Aspects in Gerontology	3
GERO 6508 Planning Field Experience In Public Health Gerontology	2
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
GERO 6997 Integrative Experience in Public Health: Gerontology	5
GERO 6995 Applied Practice Experience: Gerontology	1
<i>ELECTIVES</i>	
Electives	3
TOTAL	58 + 12 hours

TABLE D2.1.f Master in Public Health Education Curriculum	
CURRICULUM	Credits
<i>CORE</i>	
SALP 6006 Introduction to Public Health	3
BIOE 6525 Statistical Analysis	5
EPID 6523 Epidemiological Methodology	4
SAAM 6528 Principles of Environmental Public Health	3
EDSA 6250 Applied Research in Health Promotion and Health Education	3
ADSS 6516 Fundamentals of Health Policy and Management in Public Health	4
EDSA 6573 Assessment and Planning in Health Promotion and Health Education	3
CISO 6546 Social Determinants and Equity in Public Health	3
SALP 6251 Leadership in Public Health	2
INTD 6996 Interprofessional Collaborative Practice in Public Health	0 (12 hours)
<i>SPECIALTY</i>	
EDSA 6401 Perspectives and Contexts of Health Promotion and Health Education	2
EDSA 6476 Social and Behavioral Theories and Models	2
EDSA 6405 Health Communication Programs Design	3
EDSA 6475 Intervention Approaches for Health Promotion and Disease Prevention	3
EDSA 6568 Group Facilitation Skills	3
EDSA 6567 Advocacy, intersectorality and community action/mobilization	3
EDSA 6571 Health Promotion and Health Education Evaluation and Measurement	3
EDSA 6474 Managerial Considerations for Developing and Implementing Health Education Programs	2
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
EDSA 6997 Integrative Experience in Health Promotion and Health Education	2
EDSA 6996 Supervised Practice in Health Promotion and Health Education	4
<i>ELECTIVES</i>	
Electives	6
TOTAL	63 + 12 hours

- 2) Provide a matrix, in the format of Template D2-2, that indicates the assessment activity for each of the foundational competencies listed above (1-22). If the school or program addresses all of the listed foundational competencies in a single, common core curriculum, the school or program need only present a single matrix. If combined degree students do not complete the same core curriculum as students in the standalone MPH program, the school or program must present a separate matrix for each combined degree. If the school or program relies on concentration-specific courses to assess some of the foundational competencies listed above, the school or program must present a separate matrix for each concentration. (self-study document)

TABLE D2.2.a Assessment of Competencies for MASTER IN PUBLIC HEALTH (all concentrations)		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
Evidence-based Approaches to Public Health		
1. Apply epidemiological methods to the breadth of settings and situations in public health practice.	EPID 6523 Epidemiological Methodology	<p><u>Case Study Analysis:</u> The students will have the opportunity to work with their classmates in small teams in solving hypothetical public health problems applying the epidemiological method. The students will write a report describing the results of the analysis used by the team to study the problem using an epidemiological perspective. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Tests:</u> Three exams will cover the course content as presented in the course outline.</p>
2a. Select quantitative data collection methods appropriate for a given public health context.	BIOE 6525 Statistical Analysis	<p><u>Case Study or Project:</u> The project aims to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. As a learning assessment strategy, the instructor will guide the process of its development and presentation so that it constitutes a structured and well implemented application by the student of the concepts and techniques studied in this course. Criteria to be considered for the development of the case study project: Purpose, Content, Justification, Objectives, Statistical Analysis and conclusions that can be reached through the generated statistics. Case Study or Project The project aims to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. As a learning assessment strategy, the instructor will guide the process of its development and presentation so that it constitutes a structured and well implemented application by the student of the concepts and techniques studied in this course. Criteria to be considered for the development of the case study project: Purpose, Content, Justification, Objectives, Statistical Analysis, and conclusions that can be reached through the generated statistics. At the end of the case study, professor will evaluate each student based on quantitative knowledge and skills demonstrate in the case study analysis process. (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D2.2.a Assessment of Competencies for MASTER IN PUBLIC HEALTH (all concentrations)		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
2b. Select qualitative data collection methods appropriate for a given public health context.	SALP 6250 Applied Public Health Research Methods	<u>Qualitative Analysis Technical Report:</u> Students will be assigned a sample of primary documents to conduct a qualitative analysis. Primary documents can be qualitative interviews, policy documents or other text-based documents that can be used to answer a simple qualitative research question and inform a narrowly and clearly defined public health issue. Students will analyze the assigned documents using qualitative analysis software and interpret the results. Students will go through the process of coding, comparing, interpreting and displaying data. The report is the final product of this process. As part of the report students have to identify, select and describe alternative methods and approaches to complement the public health issue and research question assigned. This will allow students to understand the strength and limits of qualitative methods and analysis and articulate how other methods (both qualitative and quantitative) contribute to understanding public health issues. (Section of Syllabus: EVALUATION STRATEGIES)
3a. Analyze quantitative data using biostatistics, informatics, computer-based programming and software, as appropriate.	BIOE 6525 Statistical Analysis	<u>Case Study or Project:</u> The project aims to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. As a learning assessment strategy, the instructor will guide the process of its development and presentation so that it constitutes a structured and well implemented application by the student of the concepts and techniques studied in this course. Criteria to be considered for the development of the case study project: Purpose, Content, Justification, Objectives, Statistical Analysis and conclusions that can be reached through the generated statistics. Case Study or Project The project aims to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. As a learning assessment strategy, the instructor will guide the process of its development and presentation so that it constitutes a structured and well implemented application by the student of the concepts and techniques studied in this course. Criteria to be considered for the development of the case study project: Purpose, Content, Justification, Objectives, Statistical Analysis, and conclusions that can be reached through the generated statistics. At the end of the case study, professor will evaluate each student based on quantitative knowledge and skills demonstrate in the case study analysis process. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D2.2.a Assessment of Competencies for MASTER IN PUBLIC HEALTH (all concentrations)		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity"
3b. Analyze qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate.	SALP 6250 Applied Public Health Research Methods	<u>Qualitative Analysis Technical Report</u> : Students will be assigned a sample of primary documents to conduct a qualitative analysis. Primary documents can be qualitative interviews, policy documents or other text-based documents that can be used to answer a simple qualitative research question and inform a narrowly and clearly defined public health issue. Students will analyze the assigned documents using qualitative analysis software and interpret the results. Students will go through the process of coding, comparing, interpreting and displaying data. The report is the final product of this process. As part of the report students have to identify, select and describe alternative methods and approaches to complement the public health issue and research question assigned. This will allow students to understand the strength and limits of qualitative methods and analysis and articulate how other methods (both qualitative and quantitative) contribute to understanding public health issues._(Section of Syllabus: EVALUATION STRATEGIES)
4. Interpret results of data analysis for public health research, policy, or practice.	EPID 6523 Epidemiological Methodology	<u>Case Study Analysis</u> : The students will have the opportunity to work with their classmates in small teams in solving hypothetical public health problems applying the epidemiological method. The students will write a report describing the results of the analysis used by the team to study the problem using an epidemiological perspective. (Section of Syllabus: EVALUATION STRATEGIES)
		<u>Tests</u> : Three exams will cover the course content as presented in the course outline.
Public Health & Health Care Systems		
5. Compare the organization, structure and function of health care, public health, and regulatory systems across national and international settings.	ADSS 6516 Fundamentals of Health Policy and Management in Public Health	<u>Organizational & Management Essay</u> : The students are expected to identify and explain the positive integration of public health in the health system. In the essay narrative, the student should compare the similarities and difference between PR and other country system. Student must compare in terms of financing and delivery of healthcare services, the financing and delivery of public health services, and government intervention in healthcare and public health. (Section of Syllabus: EVALUATION STRATEGIES)
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels.	CISO 6546 Social Determinants and Equity in Public Health	<u>Weekly critical annotations (learning assessment opportunity): Connecting the dots</u> : Through their weekly readings in Perusall, students must document (using multimedia) aspects of the social environment that affect the health of individuals and populations (the entries must conform to the topic assigned for each week). At the same time, students must articulate the possible mechanisms and circumstances that cause health inequities and discuss possible interventions to address these inequities. Students should propose solutions or approaches in a clear and respectful manner, recognizing the

TABLE D2.2.a Assessment of Competencies for MASTER IN PUBLIC HEALTH (all concentrations)		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		different interests that have a bearing on public health policies. (Section of Syllabus: EVALUATION STRATEGIES)
Planning & Management to Promote Health		
7. Assess population needs, assets and capacities that affect communities' health.	ADSS 6594 Public Health Program Planning and Evaluation	<u>Individual Assignment No. 1: Defining the Planning Problem and Potential Solution(s):</u> This assignment requires the student to submit a two-page, single space written report in which he/she defines the scope and nature of the public health problem selected for planning purposes. Such definition should be based on statistics and literature which provide the foundation for the narrative presented. The problem should be expressed in terms of the population affected, the geographic distribution and the implications of the problem with its short-term and long-term consequences. Considerations include the social, economic, political, demographic and public health dimensions of the problem. In addition, the report should include a brief justification and description of service program(s) selected for intervention to address the problem. This requires to search the literature on service programs that have been proven to be adequate to address the public health issue. (Section of Syllabus: EVALUATION STRATEGIES)
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs.	SALP 6251 Leadership in Public Health	<u>Role Play:</u> The student will be given a document that outlines a real or imagined PH scenario. The learners will take on roles & act out an imagined or real scenario to demonstrate how to address cultural competency in communicating public health content, apply awareness of cultural values and practices to the design of implementation of public health policies or programs, identify stakeholders, and propose actions to build coalitions and partnerships, apply conflict resolution, mediation or negotiation techniques and apply collaboration and guiding decision-making techniques. Exercise documents - Before implementing this educational experience, the students will receive two self-assessment questionnaires that they must complete and submit to the professor. They will also receive an informative document that describes public health situation, the competencies that we want to work on, the learning objectives and the procedures for the implementation of the exercise. The course instructor will assign the roles that the students will assume during the implementation of the exercise and will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students to play the role of negotiators. This semi-structured script considers principles linked to the development of cultural competence and facilitates the application of the Getting to Yes/The Harvard Principles of Negotiation model. Students will also receive a rubric to

TABLE D2.2.a Assessment of Competencies for MASTER IN PUBLIC HEALTH (all concentrations)

Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>evaluate the exercise. This rubric must be completed by the course instructor and students.</p> <p>Pre implementation activities - Self-Assessments Questionnaires - Students will have time to prepare before class exercise and perform various activities. Specifically, prior to the exercise, participants must complete a Collaborative Leadership Self-Assessment Questionnaires and a Cultural Competency Self-Assessment. When the student completes the Cultural Competency Self-Assessment will be applying one of the principles of cultural competence: Conducting cultural self-assessment. Completing both self-assessments instruments will allow the student to think about on what their skills are and which ones they must reinforce during the implementation of the exercise. The results of the Self-Assessments Questionnaires must be completed and submitted to the professor prior to the implementation of the exercise. The students should also complete the reading of Chapter 23 Cultural Competence of Rowitz (2014), among other readings, links, and videos and study the negotiation model: Getting to Yes / The Harvard Principles of Negotiation.</p> <p>Roles and Diversity - During the implementation of the exercise, students will assume various roles and positions to address a public health situation. Some students will assume the role of mediators (a mediator as an impartial facilitator with no link to either party in a negotiation) and other students will perform the roles of negotiators (a negotiator that represents only one party, and his job is to make the best deal possible for that party. He/She is not expected to be impartial). To do this, the course instructor will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students that will assume the role of negotiators. Before the exercise, each student will know what their role is and what other parts will be represented in the exercise. The students will apply another principle of the cultural competence model [valuing diversity] after receiving the roles brief description. Specifically, the students must complete a diversity analysis. The participants prepare a document that identify all the organizations and/or groups represented in the exercise, carry out a review of literature on the positions historically assumed by these organizations and/or groups and describe the position of each party. The document must point out other groups that are not represented and should be included in the future. The students should consider the diversity of the Puerto Rican community according to the 2020 census for this analysis. Also, they must provide at least two cultural appropriate actions that could be applied in the design of strategies and</p>

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>programs. This analysis on the diversity among the organizations and/or groups represented in the exercise should be completed before the implementation of the exercise.</p> <p>Implementation - Negotiation Model - The negotiation model adopted in this exercise is: Getting to Yes / The Harvard Principles of Negotiation. All participants in the exercise must apply some principles of cultural competence and apply negotiation and mediation skills to address organizational or community challenges guided by the four principles proposed by this negotiation model. The semi-structured script and the rubric of the exercise will be provided by the course instructor. The semi-structured script and rubric will guide the students to apply some cultural competence principles and negotiation and mediation skills.</p> <p>Script/Semi-structured guide - The semi-structured script includes eight (8) parts. All participants in the exercise must apply some principles of cultural competence and the four principles proposed by the adopted negotiation model. First part of the script: The first part suggests a dialogue so that the students in the role of moderator offer a welcome to the group and share the rules of the meeting. In these meeting rules, students are encouraged to consider and apply awareness of cultural values and practices. From the second part to the fifth part, the script addresses the 4 principles of the Getting to Yes/The Harvard Principles of Negotiation and the students will have to apply them. (Principle # 1: Separate people from the problem, Principle # 2: Focus on interest, not position, Principle #3: Generate options for mutual benefits & Principle # 4: Use objective criteria). To do this, a suggested dialogue is provided for the moderators and the script also suggests questions that each of the negotiating participants must answer to apply the four Principles of Negotiation. Sixth part of the script: The sixth part of the script has the purpose of provoking the reflection of the work group/community about stakeholders & coalitions. The moderator must ask the participants to propose at least 3 strategies to identify stakeholders that could be part of this group and 3 strategies to build a coalition towards this situation. In the seventh part of the script has the purpose of provoking the reflection of the work group/community about the cultural values and practices during de exercise. Finally, in this part of the script, the students establish an agreement and answer some questions. The final agreement and action plan reflect the contributions of our diverse cultural and social groups.</p>

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		Evidence and closure of the activity - A student, participating in the process, will take a minute/record to document all the issues, agreements, and the decision made by the group. Upon completing the implementation of the exercise, the instructor and students must complete the rubric. The implementation of the exercise must be recorded. Students must also complete some reflection questions about the educational activity and discuss it at the next class meeting. Refer to Appendix for instructions and rubric. (Section of Syllabus: EVALUATION STRATEGIES for mor details)
9. Design a population-based policy, program, project or intervention.	ADSS 6594 Public Health Program Planning and Evaluation	<p><u>Planning Proposal:</u> As the major project for this course, you will prepare a complete program plan addressing a Public Health issue in a specific organization. You will not need to implement the intervention or conduct the evaluation. The plan will be grounded in the real world and, thus, will draw on real data and other information gathered in the need's assessment and planning processes. The students will work in a team format throughout the trimester, with a significant amount of work done outside of class meetings. The students will produce a single final document, and all members of the group will receive the same grade for the final document and the oral presentation peer/fellow student, course instructor, and representatives of the organization. You will have several formal and informal opportunities to receive feedback on this project throughout the trimester. Each student will be based on knowledge and skills demonstrate on individual assignment 1 described below.</p> <p><u>Individual Assignment No. 1: Defining the Planning Problem and Potential Solution(s):</u> This assignment requires the student to submit a two-page, single space written report in which he/she defines the scope and nature of the public health problem selected for planning purposes. Such definition should be based on statistics and literature which provide the foundation for the narrative presented. The problem should be expressed in terms of the population affected, the geographic distribution and the implications of the problem with its short-term and long-term consequences. Considerations include the social, economic, political, demographic and public health dimensions of the problem. In addition, the report should include a brief justification and description of service program(s) selected for intervention to address the problem. This requires to search the literature on service programs that have been proven to be adequate to address the public health issue. (Section of Syllabus: EVALUATION STRATEGIES)</p>
10. Explain basic principles and tools of budget and resource management.	ADSS 6516 Fundamentals of Health Policy and	<u>Budget Essay:</u> Students are expected to understand the concepts of budgeting. In the essay the students should discuss the budgeting role (including principles and tools) in the administrative process of planning, control and decision making. In addition, should

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
	Management in Public Health	define and explain the major components of an operating budget, its purpose and use. Also, describe the strategies for budget management to keep projects on budget. (Section of Syllabus: EVALUATION STRATEGIES)
11. Select methods to evaluate public health programs.	ADSS 6594 Public Health Program Planning and Evaluation	<p><u>Evaluation Proposal:</u> This plan is intended to apply and integrate knowledge and skills developed throughout the course. This exercise requires students to use logic model as a framework for developing the evaluation proposal. Students should include the purpose of evaluation in general terms and description of the type of evaluation that would be needed. The plan should include evaluation questions to be addressed, identification of a design, and a plan for data collection. The program timeline should include major activities of program by time frame. Description of resources should include a brief description of the personnel, including their roles, and materials needed for the program. The evaluation plan will be presented orally in class with the planning proposal. Each student will be based on knowledge and skills demonstrate on individual assignment 2 described below. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Individual Assignment No. 2: Justifying and Selecting the Evaluation Design:</u> This assignment requires the student to submit a two-page, single space written report in which he/she defines the evaluation questions to be answered, the evaluation design and methods selected to be used and the justification for its selection. A brief literature review must be included, including references on evaluation studies conducted which have proven to be appropriate in similar service programs (interventions). The student should compare three evaluation models and select the most appropriate. Considerations include the social, economic, political, demographic and public health dimensions of the problem. (Section of Syllabus: EVALUATION STRATEGIES)</p>
Policy in Public Health		
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence.	ADSS 6516 Fundamentals of Health Policy and Management in Public Health	<p><u>Policy Analysis:</u> This exercise requires students to explore a health policy topic from a variety of perspectives, using this information as a foundation for policy development and advocacy. The exercise engages students in learning about an issue and to accurately (in a non-biased fashion), identify the policy and political issues that are central to that topic. It is designed to provide students the opportunity to work in a group to prepare a policy brief. Students will receive formative evaluation of the progress reports, allowing them to improve the final product. The final policy brief will be graded. The final page count for the policy brief assignment is 5 pages minimum, 10 pages maximum, 12 point, Times New Roman font, 1" margins, double spaced, with page numbers included, and the group name listed on the paper. References are NOT included in the 10 page limit.</p>

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		The policy brief is a written document that conveys the Policy Issue, Background related to the Issue, Information pertinent to the Issue (this may include current law, debate about the issue (including ethical issues), use of evidence/data about the issue), Policy Options (including a discussion of policy making roles of the branches of government), student recommendation for Policy, and References. (Section of Syllabus: EVALUATION STRATEGIES)
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.	SALP 6251 Leadership in Public Health	<p><u>Role Play:</u> The student will be given a document that outlines a real or imagined PH scenario. The learners will take on roles & act out an imagined or real scenario to demonstrate how to address cultural competency in communicating public health content, apply awareness of cultural values and practices to the design of implementation of public health policies or programs, identify stakeholders, and propose actions to build coalitions and partnerships, apply conflict resolution, mediation or negotiation techniques and apply collaboration and guiding decision-making techniques.</p> <p>Exercise documents - Before implementing this educational experience, the students will receive two self-assessment questionnaires that they must complete and submit to the professor. They will also receive an informative document that describes public health situation, the competencies that we want to work on, the learning objectives and the procedures for the implementation of the exercise. The course instructor will assign the roles that the students will assume during the implementation of the exercise and will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students to play the role of negotiators. This semi-structured script considers principles linked to the development of cultural competence and facilitates the application of the Getting to Yes/The Harvard Principles of Negotiation model. Students will also receive a rubric to evaluate the exercise. This rubric must be completed by the course instructor and students.</p> <p>Pre implementation activities - Self-Assessments Questionnaires - Students will have time to prepare before class exercise and perform various activities. Specifically, prior to the exercise, participants must complete a Collaborative Leadership Self-Assessment Questionnaires and a Cultural Competency Self-Assessment. When the student completes the Cultural Competency Self-Assessment will be applying one of the principles of cultural competence: Conducting cultural self-assessment. Completing both self-assessments instruments will allow the student to think about on what their skills are</p>

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		<p>and which ones they must reinforce during the implementation of the exercise. The results of the Self-Assessments Questionnaires must be completed and submitted to the professor prior to the implementation of the exercise. The students should also complete the reading of Chapter 23 Cultural Competence of Rowitz (2014), among other readings, links, and videos and study the negotiation model: Getting to Yes / The Harvard Principles of Negotiation.</p> <p>Roles and Diversity - During the implementation of the exercise, students will assume various roles and positions to address a public health situation. Some students will assume the role of mediators (a mediator as an impartial facilitator with no link to either party in a negotiation) and other students will perform the roles of negotiators (a negotiator that represents only one party, and his job is to make the best deal possible for that party. He/She is not expected to be impartial). To do this, the course instructor will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students that will assume the role of negotiators. Before the exercise, each student will know what their role is and what other parts will be represented in the exercise. The students will apply another principle of the cultural competence model [valuing diversity] after receiving the roles brief description. Specifically, the students must complete a diversity analysis. The participants prepare a document that identify all the organizations and/or groups represented in the exercise, carry out a review of literature on the positions historically assumed by these organizations and/or groups and describe the position of each party. The document must point out other groups that are not represented and should be included in the future. The students should consider the diversity of the Puerto Rican community according to the 2020 census for this analysis. Also, they must provide at least two cultural appropriate actions that could be applied in the design of strategies and programs. This analysis on the diversity among the organizations and/or groups represented in the exercise should be completed before the implementation of the exercise.</p> <p>Implementation - Negotiation Model - The negotiation model adopted in this exercise is: Getting to Yes / The Harvard Principles of Negotiation. All participants in the exercise must apply some principles of cultural competence and apply negotiation and mediation skills to address organizational or community challenges guided by the four principles proposed by this negotiation model. The semi-structured script and the rubric of the exercise will be provided by the course instructor. The semi-structured script and rubric</p>

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		<p>will guide the students to apply some cultural competence principles and negotiation and mediation skills.</p> <p>Script/Semi-structured guide - The semi-structured script includes eight (8) parts. All participants in the exercise must apply some principles of cultural competence and the four principles proposed by the adopted negotiation model. First part of the script: The first part suggests a dialogue so that the students in the role of moderator offer a welcome to the group and share the rules of the meeting. In these meeting rules, students are encouraged to consider and apply awareness of cultural values and practices. From the second part to the fifth part, the script addresses the 4 principles of the Getting to Yes/The Harvard Principles of Negotiation and the students will have to apply them. (Principle # 1: Separate people from the problem, Principle # 2: Focus on interest, not position, Principle #3: Generate options for mutual benefits & Principle # 4: Use objective criteria). To do this, a suggested dialogue is provided for the moderators and the script also suggests questions that each of the negotiating participants must answer to apply the four Principles of Negotiation. Sixth part of the script: The sixth part of the script has the purpose of provoking the reflection of the work group/community about stakeholders & coalitions. The moderator must ask the participants to propose at least 3 strategies to identify stakeholders that could be part of this group and 3 strategies to build a coalition towards this situation. In the seventh part of the script has the purpose of provoking the reflection of the work group/community about the cultural values and practices during de exercise. Finally, in this part of the script, the students establish an agreement and answer some questions. The final agreement and action plan reflect the contributions of our diverse cultural and social groups.</p> <p>Evidence and closure of the activity - A student, participating in the process, will take a minute/record to document all the issues, agreements, and the decision made by the group. Upon completing the implementation of the exercise, the instructor and students must complete the rubric. The implementation of the exercise must be recorded. Students must also complete some reflection questions about the educational activity and discuss it at the next class meeting. Refer to Appendix for instructions and rubric. (Section of Syllabus: EVALUATION STRATEGIES for mor details)</p>
14. Advocate for political, social or economic policies and	CISO 6546 Social Determinants and Equity in Public Health	<p><u>Weekly critical annotations (learning assessment opportunity) Connecting the dots:</u></p> <p>Through their weekly readings in Perusall, students must document (using multimedia) aspects of the social environment that affect the health of individuals and populations</p>

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity^n
programs that will improve health in diverse populations.		(the entries must conform to the topic assigned for each week). At the same time, students must articulate the possible mechanisms and circumstances that cause health inequities and discuss possible interventions to address these inequities. Students should propose solutions or approaches in a clear and respectful manner, recognizing the different interests that have a bearing on public health policies. (Section of Syllabus: EVALUATION STRATEGIES)
15. Evaluate policies for their impact on public health and health equity.	ADSS 6516 Fundamentals of Health Policy and Management in Public Health	<u>Policy Analysis:</u> This exercise requires students to explore a health policy topic from a variety of perspectives, using this information as a foundation for policy development and advocacy. The exercise engages students in learning about an issue and to accurately (in a non-biased fashion), identify the policy and political issues that are central to that topic. It is designed to provide students the opportunity to work in a group to prepare a policy brief. Students will receive formative evaluation of the progress reports, allowing them to improve the final product. The final policy brief will be graded. The final page count for the policy brief assignment is 5 pages minimum, 10 pages maximum, 12 point, Times New Roman font, 1" margins, double spaced, with page numbers included, and the group name listed on the paper. References are NOT included in the 10 page limit. The policy brief is a written document that conveys the Policy Issue, Background related to the Issue, Information pertinent to the Issue (this may include current law, debate about the issue (including ethical issues), use of evidence/data about the issue), Policy Options (including a discussion of policy making roles of the branches of government), student recommendation for Policy, and References. (Section of Syllabus: EVALUATION STRATEGIES)
	CISO 6546 Social Determinants and Equity in Public Health	<u>Policy Brief Evaluation:</u> Students are tasked with critically analyzing the results of a public policy implementation on public health and health equity. The brief must outline recommendations for policy changes incorporating use of persuasive arguments and critical thinking. Suggested topics for public policy brief evaluation include education, race/ethnicity, gender, housing, employment/working conditions, nutrition, and population health. (Section of Syllabus: EVALUATION STRATEGIES)
Leadership		
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making.	SALP 6251 Leadership in Public Health	<u>Role Play:</u> The student will be given a document that outlines a real or imagined PH scenario. The learners will take on roles & act out an imagined or real scenario to demonstrate how to address cultural competency in communicating public health content, apply awareness of cultural values and practices to the design of implementation of public health policies or programs, identify stakeholders, and propose

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>actions to build coalitions and partnerships, apply conflict resolution, mediation or negotiation techniques and apply collaboration and guiding decision-making techniques.</p> <p>Exercise documents - Before implementing this educational experience, the students will receive two self-assessment questionnaires that they must complete and submit to the professor. They will also receive an informative document that describes public health situation, the competencies that we want to work on, the learning objectives and the procedures for the implementation of the exercise. The course instructor will assign the roles that the students will assume during the implementation of the exercise and will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students to play the role of negotiators. This semi-structured script considers principles linked to the development of cultural competence and facilitates the application of the Getting to Yes/The Harvard Principles of Negotiation model. Students will also receive a rubric to evaluate the exercise. This rubric must be completed by the course instructor and students.</p> <p>Pre implementation activities - Self-Assessments Questionnaires - Students will have time to prepare before class exercise and perform various activities. Specifically, prior to the exercise, participants must complete a Collaborative Leadership Self-Assessment Questionnaires and a Cultural Competency Self-Assessment. When the student completes the Cultural Competency Self-Assessment will be applying one of the principles of cultural competence: Conducting cultural self-assessment. Completing both self-assessments instruments will allow the student to think about on what their skills are and which ones they must reinforce during the implementation of the exercise. The results of the Self-Assessments Questionnaires must be completed and submitted to the professor prior to the implementation of the exercise. The students should also complete the reading of Chapter 23 Cultural Competence of Rowitz (2014), among other readings, links, and videos and study the negotiation model: Getting to Yes / The Harvard Principles of Negotiation.</p> <p>Roles and Diversity - During the implementation of the exercise, students will assume various roles and positions to address a public health situation. Some students will assume the role of mediators (a mediator as an impartial facilitator with no link to either party in a negotiation) and other students will perform the roles of negotiators (a negotiator that represents only one party, and his job is to make the best deal possible</p>

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		<p>interest, not position, Principle #3: Generate options for mutual benefits & Principle # 4: Use objective criteria). To do this, a suggested dialogue is provided for the moderators and the script also suggests questions that each of the negotiating participants must answer to apply the four Principles of Negotiation. Sixth part of the script: The sixth part of the script has the purpose of provoking the reflection of the work group/community about stakeholders & coalitions. The moderator must ask the participants to propose at least 3 strategies to identify stakeholders that could be part of this group and 3 strategies to build a coalition towards this situation. In the seventh part of the script has the purpose of provoking the reflection of the work group/community about the cultural values and practices during de exercise. Finally, in this part of the script, the students establish an agreement and answer some questions. The final agreement and action plan reflect the contributions of our diverse cultural and social groups.</p> <p>Evidence and closure of the activity - A student, participating in the process, will take a minute/record to document all the issues, agreements, and the decision made by the group. Upon completing the implementation of the exercise, the instructor and students must complete the rubric. The implementation of the exercise must be recorded. Students must also complete some reflection questions about the educational activity and discuss it at the next class meeting. Refer to Appendix for instructions and rubric. (Section of Syllabus: EVALUATION STRATEGIES for mor details)</p>
17. Apply negotiation and mediation skills to address organizational or community challenges.	SALP 6251 Leadership in Public Health	<p><u>Role Play:</u> The student will be given a document that outlines a real or imagined PH scenario. The learners will take on roles & act out an imagined or real scenario to demonstrate how to address cultural competency in communicating public health content, apply awareness of cultural values and practices to the design of implementation of public health policies or programs, identify stakeholders, and propose actions to build coalitions and partnerships, apply conflict resolution, mediation or negotiation techniques and apply collaboration and guiding decision-making techniques.</p> <p>Exercise documents - Before implementing this educational experience, the students will receive two self-assessment questionnaires that they must complete and submit to the professor. They will also receive an informative document that describes public health situation, the competencies that we want to work on, the learning objectives and the procedures for the implementation of the exercise. The course instructor will assign the</p>

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TABLE D2.2.a Assessment of Competencies for MASTER IN PUBLIC HEALTH (all concentrations)

Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>represented in the exercise, carry out a review of literature on the positions historically assumed by these organizations and/or groups and describe the position of each party. The document must point out other groups that are not represented and should be included in the future. The students should consider the diversity of the Puerto Rican community according to the 2020 census for this analysis. Also, they must provide at least two cultural appropriate actions that could be applied in the design of strategies and programs. This analysis on the diversity among the organizations and/or groups represented in the exercise should be completed before the implementation of the exercise.</p> <p>Implementation - Negotiation Model - The negotiation model adopted in this exercise is: Getting to Yes / The Harvard Principles of Negotiation. All participants in the exercise must apply some principles of cultural competence and apply negotiation and mediation skills to address organizational or community challenges guided by the four principles proposed by this negotiation model. The semi-structured script and the rubric of the exercise will be provided by the course instructor. The semi-structured script and rubric will guide the students to apply some cultural competence principles and negotiation and mediation skills.</p> <p>Script/Semi-structured guide - The semi-structured script includes eight (8) parts. All participants in the exercise must apply some principles of cultural competence and the four principles proposed by the adopted negotiation model. First part of the script: The first part suggests a dialogue so that the students in the role of moderator offer a welcome to the group and share the rules of the meeting. In these meeting rules, students are encouraged to consider and apply awareness of cultural values and practices. From the second part to the fifth part, the script addresses the 4 principles of the Getting to Yes/The Harvard Principles of Negotiation and the students will have to apply them. (Principle # 1: Separate people from the problem, Principle # 2: Focus on interest, not position, Principle #3: Generate options for mutual benefits & Principle # 4: Use objective criteria). To do this, a suggested dialogue is provided for the moderators and the script also suggests questions that each of the negotiating participants must answer to apply the four Principles of Negotiation. Sixth part of the script: The sixth part of the script has the purpose of provoking the reflection of the work group/community about stakeholders & coalitions. The moderator must ask the participants to propose at least 3 strategies to identify stakeholders that could be part of this group and 3 strategies to build a coalition towards this situation. In the seventh part of the script has the purpose</p>

TABLE D2.2.a Assessment of Competencies for MASTER IN PUBLIC HEALTH (all concentrations)		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>of provoking the reflection of the work group/community about the cultural values and practices during de exercise. Finally, in this part of the script, the students establish an agreement and answer some questions. The final agreement and action plan reflect the contributions of our diverse cultural and social groups.</p> <p>Evidence and closure of the activity - A student, participating in the process, will take a minute/record to document all the issues, agreements, and the decision made by the group. Upon completing the implementation of the exercise, the instructor and students must complete the rubric. The implementation of the exercise must be recorded. Students must also complete some reflection questions about the educational activity and discuss it at the next class meeting. Refer to Appendix for instructions and rubric. (Section of Syllabus: EVALUATION STRATEGIES for more details)</p>
Communication		
18. Select communication strategies for different audiences and sectors.	INTD 6996 Interprofessional Collaboration Practice in Public Health	<p><u>Case study analysis:</u> The student will prepare a professional quality Power Point presentation and present a professional level oral presentation covering the major components of case study analysis and recommendations; strengths, weaknesses and lessons learned of the learning experience. As part of case study analysis, student will communicate intervention strategies to patients, families, communities, and professionals in health and other fields in a responsive appropriate manner that supports the promotion and maintenance of health and the prevention and treatment of disease regardless their level of understanding and educational backgrounds. Upon completing the implementation of the exercise, the instructor must complete the rubric and students the self-assessment. The implementation of the exercise must be recorded. Each student must also complete a reflective exercise related to educational activity as part of individual evaluation of his/her performance. (Section of Syllabus: EVALUATION STRATEGIES)</p>
19. Communicate audience-appropriate public health content, both in writing and through oral presentation.	ADSS 6594 Public Health Program Planning and Evaluation	<p><u>Planning Proposal:</u> As the major project for this course, you will prepare a complete program plan addressing a Public Health issue in a specific organization. You will not need to implement the intervention or conduct the evaluation. The plan will be grounded in the real world and, thus, will draw on real data and other information gathered in the need's assessment and planning processes. The students will work in a team format throughout the trimester, with a significant amount of work done outside of class meetings. The students will produce a single final document, and all members of the group will receive the same grade for the final document and the oral presentation peer/fellow student, course instructor, and representatives of the organization. You will</p>

TABLE D2.2.a Assessment of Competencies for MASTER IN PUBLIC HEALTH (all concentrations)		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		have several formal and informal opportunities to receive feedback on this project throughout the trimester. Each student will be based on knowledge and skills demonstrate on individual assignment 1. (Section of Syllabus: EVALUATION STRATEGIES)
20. Describe the importance of cultural competence in communicating public health content.	SALP 6251 Leadership in Public Health	<u>Six Minutes Paper Exercise</u> : Students will answer 6 questions related to the things that they have learned in the class or the treated topic. (1) Why is important consider cultural diversity in my community or an organization? (2) Why is important apply skills of cultural competence in communicating public health content? (3) How can we address issues with community members in a culturally appropriate manner? (4) Are we open to learning from others regardless of status or role? (5) Do we value community members' expertise regarding their community and how best to interact with these members? (6) How will the decision reflect the cultural values of our community? (Section of Syllabus: EVALUATION STRATEGIES)
Interprofessional Practice		
21. Perform effectively on interprofessional teams.	INTD 6996 Interprofessional Collaboration Practice in Public Health	<p><u>Case study analysis</u>: The student will prepare a professional quality Power Point presentation and present a professional level oral presentation covering the major components of case study analysis and recommendations; strengths, weaknesses and lessons learned of the learning experience. As part of case study analysis, student will communicate intervention strategies to patients, families, communities, and professionals in health and other fields in a responsive appropriate manner that supports the promotion and maintenance of health and the prevention and treatment of disease regardless their level of understanding and educational backgrounds. Upon completing the implementation of the exercise, the instructor must complete the rubric and students the self-assessment. The implementation of the exercise must be recorded. Each student must also complete a reflective exercise related to educational activity as part of individual evaluation of his/her performance. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Reflective essay</u>: Each student must develop an essay about their personal and professional reactions to the Interprofessional experience and the lessons learned. They must elaborate on how has proven their leadership and teamwork skills regarding a critical issue or concern of the case study analysis. (Section of Syllabus: EVALUATION STRATEGIES)</p>
Systems Thinking		

TABLE D2.2.a Assessment of Competencies for MASTER IN PUBLIC HEALTH (all concentrations)		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
22. Apply systems thinking tools to a public health issue.	SAAM 6528 Principles of Environmental Public Health	<u>System Thinking Tools</u> Concept maps-Students will represent in circles or boxes different types of environmental exposures and the concepts of: assessment, prevention, controlling, exposure pathways, exposure measurement, exposure and risk environmental assessment and methods, for the represented environmental hazards. Through lines, words, and phrases they will link and integrate these concepts to explain the relationship between them. Multiple cause-multiple effects diagram-Students will draw a diagram to represent different aspects of a particular environmental exposure or hazard and their consequential effects on human and public health. Then students will be required to present orally the explanation of the diagram. Input-output diagram-Using an input-output diagram, students will represent human actions that contribute to climate change and its consequent impacts to the environment and public health. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity"
Evidence-based Approaches to Public Health		
1. Apply epidemiological methods to the breadth of settings and situations in public health practice.	EPID 6523 Epidemiological Methodology	<p><u>Case Study Analysis:</u> The students will have the opportunity to work with their classmates in small teams in solving hypothetical public health problems applying the epidemiological method. The students will write a report describing the results of the analysis used by the team to study the problem using an epidemiological perspective. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Tests:</u> Three exams will cover the course content as presented in the course outline.</p>
2a. Select quantitative data collection methods appropriate for a given public health context.	BIOE 6525 Statistical Analysis	<p>**Case Study or Project: The project aims to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. As a learning assessment strategy, the instructor will guide the process of its development and presentation so that it constitutes a structured and well implemented application by the student of the concepts and techniques studied in this course. Criteria to be considered for the development of the case study project: Purpose, Content, Justification, Objectives, Statistical Analysis and conclusions that can be reached through the generated statistics. Case Study or Project The project aims to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. As a learning assessment strategy, the instructor will guide the process of its development and presentation so that it constitutes a structured and well implemented application by the student of the concepts and techniques studied in this course. Criteria to be considered for the development of the case study project: Purpose, Content, Justification, Objectives, Statistical Analysis, and conclusions that can be reached through the generated statistics. At the end of the case study, professor will evaluate each student based on quantitative knowledge and skills demonstrate in the case study analysis process. (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
2b. Select qualitative data collection methods appropriate for a given public health context.	EDSA 6250 Applied Research in Health Promotion and Health Education	<u>Qualitative Analysis Technical Report</u> : Students will be assigned a sample of primary documents to conduct a qualitative analysis. Primary documents can be qualitative interviews, policy documents or other text-based documents that can be used to answer a simple qualitative research question and inform a narrowly and clearly defined public health issue. Students will analyze the assigned documents using qualitative analysis software and interpret the results. Students will go through the process of coding, comparing, interpreting and displaying data. The report is the final product of this process. As part of the report students have to identify, select and describe alternative methods and approaches to complement the public health issue and research question assigned. This will allow students to understand the strength and limits of qualitative methods and analysis and articulate how other methods (both qualitative and quantitative) contribute to understanding public health issues. (Section of Syllabus: EVALUATION STRATEGIES)
3a. Analyze quantitative data using biostatistics, informatics, computer-based programming and software, as appropriate.	BIOE 6525 Statistical Analysis	<u>**Case Study or Project</u> : The project aims to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. As a learning assessment strategy, the instructor will guide the process of its development and presentation so that it constitutes a structured and well implemented application by the student of the concepts and techniques studied in this course. Criteria to be considered for the development of the case study project: Purpose, Content, Justification, Objectives, Statistical Analysis and conclusions that can be reached through the generated statistics. Case Study or Project The project aims to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. As a learning assessment strategy, the instructor will guide the process of its development and presentation so that it constitutes a structured and well implemented application by the student of the concepts and techniques studied in this course. Criteria to be considered for the development of the case study project: Purpose, Content, Justification, Objectives, Statistical Analysis, and conclusions that can be reached through the generated statistics. At the end of the case study, professor will evaluate each student based on quantitative knowledge and skills demonstrate in the case study analysis process. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity"
3b. Analyze qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate.	EDSA 6250 Applied Research in Health Promotion and Health Education	<u>Qualitative Analysis Technical Report</u> : Students will be assigned a sample of primary documents to conduct a qualitative analysis. Primary documents can be qualitative interviews, policy documents or other text-based documents that can be used to answer a simple qualitative research question and inform a narrowly and clearly defined public health issue. Students will analyze the assigned documents using qualitative analysis software and interpret the results. Students will go through the process of coding, comparing, interpreting and displaying data. The report is the final product of this process. As part of the report students have to identify, select and describe alternative methods and approaches to complement the public health issue and research question assigned. This will allow students to understand the strength and limits of qualitative methods and analysis and articulate how other methods (both qualitative and quantitative) contribute to understanding public health issues. (Section of Syllabus: EVALUATION STRATEGIES)
4. Interpret results of data analysis for public health research, policy, or practice.	EPID 6523 Epidemiological Methodology	<u>Case Study Analysis</u> : The students will have the opportunity to work with their classmates in small teams in solving hypothetical public health problems applying the epidemiological method. The students will write a report describing the results of the analysis used by the team to study the problem using an epidemiological perspective. (Section of Syllabus: EVALUATION STRATEGIES)
		<u>Tests</u> : Three exams will cover the course content as presented in the course outline.
Public Health & Health Care Systems		
5. Compare the organization, structure and function of health care, public health, and regulatory systems across national and international settings.	ADSS 6516 Fundamentals of Health Policy and Management in Public Health	<u>Organizational & Management Essay</u> : The students are expected to identify and explain the positive integration of public health in the health system. In the essay narrative, the student should compare the similarities and difference between PR and other country system. Student must compare in terms of financing and delivery of healthcare services, the financing and delivery of public health services, and government intervention in healthcare and public health. (Section of Syllabus: EVALUATION STRATEGIES)
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels.	CISO 6546 Social Determinants and Equity in Public Health	<u>Weekly critical annotations (learning assessment opportunity) Connecting the dots</u> : Through their weekly readings in Perusall, students must document (using multimedia) aspects of the social environment that affect the health of individuals and populations (the entries must conform to the topic assigned for each week). At the same time, students must articulate the possible mechanisms and circumstances that cause health inequities and discuss possible interventions to address these inequities. Students should propose solutions or approaches in a clear and respectful manner, recognizing the

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		different interests that have a bearing on public health policies. (Section of Syllabus: EVALUATION STRATEGIES)
Planning & Management to Promote Health		
7. Assess population needs, assets and capacities that affect communities' health.	EDSA 6573 Assessment and Planning in Health Promotion and Health Education	<p><u>Health Education and Health Promotion Program Planning Written Proposal and Oral Presentation:</u></p> <p>Written Proposal - Health Education and Health Promotion Program Planning Proposal: The student will develop a plan that addresses one of the identified health needs & cultural values & practices of the chosen target population through health education based on the findings from the assessment, other professional literature, and resources. The proposal must include the following steps: (1) identify the health and social needs of a particular community (2) describe policies that impact public health and health equity, (3) select a vision, mission, goal/s and objectives of the program, (4) describe the importance of cultural competence in intervention planning, (5) apply the theoretical constructs to address a health or social need of a particular community group, (6) describe at least three health education interventions using health education principles, strategies, methods, and techniques to promote learning and change, two health communication interventions and one intersectoral collaboration action for health promotion & (6) select methods to evaluate the program. For need assessment the student will assess population needs, assets, capacities and cultural values and practices that affect a community. The population needs, assets, capacities and cultural values and practices that affect a community must describe (in narrative and a figure) the assessment carried out according to Phases 1-4 of the PRECEDE-PROCEDE model by Lawrence Green or use Phase 1 and Phase 2 of the Simmons-Morton (1998) Multilevel Approach to Community Health (MATCH) planning model. The student will describe the methodology used to collect the data/information. The assessment must include at least secondary data analysis and informal conversations with key people. The student must present a secondary data analysis of the national core documents and statistics at the national and/or regional level and qualitative analysis of informal conversations with key people who are working with the community and with people from the community. The student must include all the areas, you must assess population needs as suggested in the planning model and must assess the capacities and cultural values and practices that affect a community. (Section of Syllabus: EVALUATION STRATEGIES for more details)</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>Oral Presentation - The student will present Health Education and Health Promotion Proposal. The student will prepare a professional quality Power Point presentation and deliver a professional level oral presentation covering the main components. Students will make the oral presentation to peers/fellow students, course instructor, and at least 2 field health educators who have graduated from the Master in Public Health Education. The oral presentation considers the following criteria: content, organization, grammar and spelling, visual design, speaking skills, eye contact, personal appearance, and length. The peer/fellow student, course instructor, and the 2 field health educators that receive the proposal will have to complete the rubric of the oral presentation. (Section of Syllabus: EVALUATION STRATEGIES)</p>
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs.	SALP 6251 Leadership in Public Health	<p><u>Role Play:</u> The student will be given a document that outlines a real or imagined PH scenario. The learners will take on roles & act out an imagined or real scenario to demonstrate how to address cultural competency in communicating public health content, apply awareness of cultural values and practices to the design of implementation of public health policies or programs, identify stakeholders, and propose actions to build coalitions and partnerships, apply conflict resolution, mediation or negotiation techniques and apply collaboration and guiding decision-making techniques.</p> <p>Exercise documents -Before implementing this educational experience, the students will receive two self-assessment questionnaires that they must complete and submit to the professor. They will also receive an informative document that describes public health situation, the competencies that we want to work on, the learning objectives and the procedures for the implementation of the exercise. The course instructor will assign the roles that the students will assume during the implementation of the exercise and will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students to play the role of negotiators. This semi-structured script considers principles linked to the development of cultural competence and facilitates the application of the Getting to Yes/The Harvard Principles of Negotiation model. Students will also receive a rubric to evaluate the exercise. This rubric must be completed by the course instructor and students.</p> <p>Pre implementation activities - Self-Assessments Questionnaires - Students will have time to prepare before class exercise and perform various activities. Specifically, prior to the</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>exercise, participants must complete a Collaborative Leadership Self-Assessment Questionnaires and a Cultural Competency Self-Assessment. When the student completes the Cultural Competency Self-Assessment will be applying one of the principles of cultural competence: Conducting cultural self-assessment. Completing both self-assessments instruments will allow the student to think about on what their skills are and which ones they must reinforce during the implementation of the exercise. The results of the Self-Assessments Questionnaires must be completed and submitted to the professor prior to the implementation of the exercise. The students should also complete the reading of Chapter 23 Cultural Competence of Rowitz (2014), among other readings, links, and videos and study the negotiation model: Getting to Yes / The Harvard Principles of Negotiation.</p> <p>Roles and Diversity - During the implementation of the exercise, students will assume various roles and positions to address a public health situation. Some students will assume the role of mediators (a mediator as an impartial facilitator with no link to either party in a negotiation) and other students will perform the roles of negotiators (a negotiator that represents only one party, and his job is to make the best deal possible for that party. He/She is not expected to be impartial). To do this, the course instructor will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students that will assume the role of negotiators. Before the exercise, each student will know what their role is and what other parts will be represented in the exercise. The students will apply another principle of the cultural competence model [valuing diversity] after receiving the roles brief description. Specifically, the students must complete a diversity analysis. The participants prepare a document that identify all the organizations and/or groups represented in the exercise, carry out a review of literature on the positions historically assumed by these organizations and/or groups and describe the position of each party. The document must point out other groups that are not represented and should be included in the future. The students should consider the diversity of the Puerto Rican community according to the 2020 census for this analysis. Also, they must provide at least two cultural appropriate actions that could be applied in the design of strategies and programs. This analysis on the diversity among the organizations and/or groups represented in the exercise should be completed before the implementation of the exercise.</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education

Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>Implementation - Negotiation Model - The negotiation model adopted in this exercise is: Getting to Yes / The Harvard Principles of Negotiation. All participants in the exercise must apply some principles of cultural competence and apply negotiation and mediation skills to address organizational or community challenges guided by the four principles proposed by this negotiation model. The semi-structured script and the rubric of the exercise will be provided by the course instructor. The semi-structured script and rubric will guide the students to apply some cultural competence principles and negotiation and mediation skills.</p> <p>Script/Semi-structured guide - The semi-structured script includes eight (8) parts. All participants in the exercise must apply some principles of cultural competence and the four principles proposed by the adopted negotiation model. First part of the script: The first part suggests a dialogue so that the students in the role of moderator offer a welcome to the group and share the rules of the meeting. In these meeting rules, students are encouraged to consider and apply awareness of cultural values and practices. From the second part to the fifth part, the script addresses the 4 principles of the Getting to Yes/The Harvard Principles of Negotiation and the students will have to apply them. (Principle # 1: Separate people from the problem, Principle # 2: Focus on interest, not position, Principle #3: Generate options for mutual benefits & Principle # 4: Use objective criteria). To do this, a suggested dialogue is provided for the moderators and the script also suggests questions that each of the negotiating participants must answer to apply the four Principles of Negotiation. Sixth part of the script: The sixth part of the script has the purpose of provoking the reflection of the work group/community about stakeholders & coalitions. The moderator must ask the participants to propose at least 3 strategies to identify stakeholders that could be part of this group and 3 strategies to build a coalition towards this situation. In the seventh part of the script has the purpose of provoking the reflection of the work group/community about the cultural values and practices during de exercise. Finally, in this part of the script, the students establish an agreement and answer some questions. The final agreement and action plan reflect the contributions of our diverse cultural and social groups.</p> <p>Evidence and closure of the activity - A student, participating in the process, will take a minute/record to document all the issues, agreements, and the decision made by the group. Upon completing the implementation of the exercise, the instructor and students must complete the rubric. The implementation of the exercise must be recorded. Students must also complete some reflection questions about the educational activity</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		and discuss it at the next class meeting. Refer to Appendix for instructions and rubric. (Section of Syllabus: EVALUATION STRATEGIES for more details)
9. Design a population-based policy, program, project or intervention.	EDSA 6573 Assessment and Planning in Health Promotion and Health Education	<p><u>Health Education and Health Promotion Program Planning Written Proposal and Oral Presentation</u></p> <p>Written Proposal - Health Education and Health Promotion Program Planning Proposal: The student will develop a plan that addresses one of the identified health needs & cultural values & practices of the chosen target population through health education based on the findings from the assessment, other professional literature, and resources. The proposal must include the following steps: (1) identify the health and social needs of a particular community (2) describe policies that impact public health and health equity, (3) select a vision, mission, goal/s and objectives of the program, (4) describe the importance of cultural competence in intervention planning, (5) apply the theoretical constructs to address a health or social need of a particular community group, (6) describe at least three health education interventions using health education principles, strategies, methods, and techniques to promote learning and change, two health communication interventions and one intersectoral collaboration action for health promotion & (6) select methods to evaluate the program. For need assessment the student will assess population needs, assets, capacities and cultural values and practices that affect a community. The population needs, assets, capacities and cultural values and practices that affect a community must describe (in narrative and a figure) the assessment carried out according to Phases 1-4 of the PRECEDE-PROCEDE model by Lawrence Green or use Phase 1 and Phase 2 of the Simmons-Morton (1998) Multilevel Approach to Community Health (MATCH) planning model. The student will describe the methodology used to collect the data/information. The assessment must include at least secondary data analysis and informal conversations with key people. The student must present a secondary data analysis of the national core documents and statistics at the national and/or regional level and qualitative analysis of informal conversations with key people who are working with the community and with people from the community. The student must include all the areas, you must assess population needs as suggested in the planning model and must assess the capacities and cultural values and practices that affect a community. (Section of Syllabus: EVALUATION STRATEGIES for more details)</p> <p>Oral Presentation - The student will present Health Education and Health Promotion Proposal. The student will prepare a professional quality Power Point presentation and</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		deliver a professional level oral presentation covering the main components. Students will make the oral presentation to peers/fellow students, course instructor, and at least 2 field health educators who have graduated from the Master in Public Health Education. The oral presentation considers the following criteria: content, organization, grammar and spelling, visual design, speaking skills, eye contact, personal appearance, and length. The peer/fellow student, course instructor, and the 2 field health educators that receive the proposal will have to complete the rubric of the oral presentation. (Section of Syllabus: EVALUATION STRATEGIES)
Explain basic principles and tools of budget and resource management.	ADSS 6516 Fundamentals of Health Policy and Management in Public Health	<u>Budget Essay:</u> Students are expected to understand the concepts of budgeting. In the essay the students should discuss the budgeting role (including principles and tools) in the administrative process of planning, control and decision making. In addition, should define and explain the major components of an operating budget, its purpose and use. Also, describe the strategies for budget management to keep projects on budget. (Section of Syllabus: EVALUATION STRATEGIES)
Select methods to evaluate public health programs.	EDSA 6573 Assessment and Planning in Health Promotion and Health Education	<u>Health Education and Health Promotion Program Planning Written Proposal and Oral Presentation:</u> Written Proposal - Health Education and Health Promotion Program Planning Proposal: The student will develop a plan that addresses one of the identified health needs & cultural values & practices of the chosen target population through health education based on the findings from the assessment, other professional literature, and resources. The proposal must include the following steps: (1) identify the health and social needs of a particular community (2) describe policies that impact public health and health equity, (3) select a vision, mission, goal/s and objectives of the program, (4) describe the importance of cultural competence in intervention planning, (5) apply the theoretical constructs to address a health or social need of a particular community group, (6) describe at least three health education interventions using health education principles, strategies, methods, and techniques to promote learning and change, two health communication interventions and one intersectoral collaboration action for health promotion & (6) select methods to evaluate the program. For need assessment the student will assess population needs, assets, capacities and cultural values and practices that affect a community. The population needs, assets, capacities and cultural values and practices that affect a community must describe (in narrative and a figure) the assessment carried out according to Phases 1-4 of the PRECEDE-PROCEDE model by Lawrence Green or use Phase 1 and Phase 2 of the Simmons-Morton (1998) Multilevel Approach to Community Health (MATCH) planning model. The student will describe the

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>methodology used to collect the data/information. The assessment must include at least secondary data analysis and informal conversations with key people. The student must present a secondary data analysis of the national core documents and statistics at the national and/or regional level and qualitative analysis of informal conversations with key people who are working with the community and with people from the community. The student must include all the areas, you must assess population needs as suggested in the planning model and must assess the capacities and cultural values and practices that affect a community. (Section of Syllabus: EVALUATION STRATEGIES for more details)</p> <p>Oral Presentation - The student will present Health Education and Health Promotion Proposal. The student will prepare a professional quality Power Point presentation and deliver a professional level oral presentation covering the main components. Students will make the oral presentation to peers/fellow students, course instructor, and at least 2 field health educators who have graduated from the Master in Public Health Education. The oral presentation considers the following criteria: content, organization, grammar and spelling, visual design, speaking skills, eye contact, personal appearance, and length. The peer/fellow student, course instructor, and the 2 field health educators that receive the proposal will have to complete the rubric of the oral presentation. (Section of Syllabus: EVALUATION STRATEGIES)</p>
Policy in Public Health		
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence.	ADSS 6516 Fundamentals of Health Policy and Management in Public Health	<p><u>Policy Analysis:</u> This exercise requires students to explore a health policy topic from a variety of perspectives, using this information as a foundation for policy development and advocacy. The exercise engages students in learning about an issue and to accurately (in a non-biased fashion), identify the policy and political issues that are central to that topic. It is designed to provide students the opportunity to work in a group to prepare a policy brief. Students will receive formative evaluation of the progress reports, allowing them to improve the final product. The final policy brief will be graded. The final page count for the policy brief assignment is 5 pages minimum, 10 pages maximum, 12 point, Times New Roman font, 1" margins, double spaced, with page numbers included, and the group name listed on the paper. References are NOT included in the 10 page limit. The policy brief is a written document that conveys the Policy Issue, Background related to the Issue, Information pertinent to the Issue (this may include current law, debate about the issue (including ethical issues), use of evidence/data about the issue), Policy Options (including a discussion of policy making roles of the branches of government),</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		student recommendation for Policy, and References. (Section of Syllabus: EVALUATION STRATEGIES)
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.	SALP 6251 Leadership in Public Health	<p><u>Role Play:</u> The student will be given a document that outlines a real or imagined PH scenario. The learners will take on roles & act out an imagined or real scenario to demonstrate how to address cultural competency in communicating public health content, apply awareness of cultural values and practices to the design of implementation of public health policies or programs, identify stakeholders, and propose actions to build coalitions and partnerships, apply conflict resolution, mediation or negotiation techniques and apply collaboration and guiding decision-making techniques.</p> <p>Exercise documents - Before implementing this educational experience, the students will receive two self-assessment questionnaires that they must complete and submit to the professor. They will also receive an informative document that describes public health situation, the competencies that we want to work on, the learning objectives and the procedures for the implementation of the exercise. The course instructor will assign the roles that the students will assume during the implementation of the exercise and will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students to play the role of negotiators. This semi-structured script considers principles linked to the development of cultural competence and facilitates the application of the Getting to Yes/The Harvard Principles of Negotiation model. Students will also receive a rubric to evaluate the exercise. This rubric must be completed by the course instructor and students.</p> <p>Pre implementation activities - Self-Assessments Questionnaires - Students will have time to prepare before class exercise and perform various activities. Specifically, prior to the exercise, participants must complete a Collaborative Leadership Self-Assessment Questionnaires and a Cultural Competency Self-Assessment. When the student completes the Cultural Competency Self-Assessment will be applying one of the principles of cultural competence: Conducting cultural self-assessment. Completing both self-assessments instruments will allow the student to think about on what their skills are and which ones they must reinforce during the implementation of the exercise. The results of the Self-Assessments Questionnaires must be completed and submitted to the professor prior to the implementation of the exercise. The students should also complete the reading of Chapter 23 Cultural Competence of Rowitz (2014), among other readings,</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>links, and videos and study the negotiation model: Getting to Yes / The Harvard Principles of Negotiation.</p> <p>Roles and Diversity - During the implementation of the exercise, students will assume various roles and positions to address a public health situation. Some students will assume the role of mediators (a mediator as an impartial facilitator with no link to either party in a negotiation) and other students will perform the roles of negotiators (a negotiator that represents only one party, and his job is to make the best deal possible for that party. He/She is not expected to be impartial). To do this, the course instructor will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students that will assume the role of negotiators. Before the exercise, each student will know what their role is and what other parts will be represented in the exercise. The students will apply another principle of the cultural competence model [valuing diversity] after receiving the roles brief description. Specifically, the students must complete a diversity analysis. The participants prepare a document that identify all the organizations and/or groups represented in the exercise, carry out a review of literature on the positions historically assumed by these organizations and/or groups and describe the position of each party. The document must point out other groups that are not represented and should be included in the future. The students should consider the diversity of the Puerto Rican community according to the 2020 census for this analysis. Also, they must provide at least two cultural appropriate actions that could be applied in the design of strategies and programs. This analysis on the diversity among the organizations and/or groups represented in the exercise should be completed before the implementation of the exercise.</p> <p>Implementation - Negotiation Model - The negotiation model adopted in this exercise is: Getting to Yes / The Harvard Principles of Negotiation. All participants in the exercise must apply some principles of cultural competence and apply negotiation and mediation skills to address organizational or community challenges guided by the four principles proposed by this negotiation model. The semi-structured script and the rubric of the exercise will be provided by the course instructor. The semi-structured script and rubric will guide the students to apply some cultural competence principles and negotiation and mediation skills.</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education

Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>Script/Semi-structured guide - The semi-structured script includes eight (8) parts. All participants in the exercise must apply some principles of cultural competence and the four principles proposed by the adopted negotiation model. First part of the script: The first part suggests a dialogue so that the students in the role of moderator offer a welcome to the group and share the rules of the meeting. In these meeting rules, students are encouraged to consider and apply awareness of cultural values and practices. From the second part to the fifth part, the script addresses the 4 principles of the Getting to Yes/The Harvard Principles of Negotiation and the students will have to apply them. (Principle # 1: Separate people from the problem, Principle # 2: Focus on interest, not position, Principle #3: Generate options for mutual benefits & Principle # 4: Use objective criteria). To do this, a suggested dialogue is provided for the moderators and the script also suggests questions that each of the negotiating participants must answer to apply the four Principles of Negotiation. Sixth part of the script: The sixth part of the script has the purpose of provoking the reflection of the work group/community about stakeholders & coalitions. The moderator must ask the participants to propose at least 3 strategies to identify stakeholders that could be part of this group and 3 strategies to build a coalition towards this situation. In the seventh part of the script has the purpose of provoking the reflection of the work group/community about the cultural values and practices during de exercise. Finally, in this part of the script, the students establish an agreement and answer some questions. The final agreement and action plan reflect the contributions of our diverse cultural and social groups.</p> <p>Evidence and closure of the activity - A student, participating in the process, will take a minute/record to document all the issues, agreements, and the decision made by the group. Upon completing the implementation of the exercise, the instructor and students must complete the rubric. The implementation of the exercise must be recorded. Students must also complete some reflection questions about the educational activity and discuss it at the next class meeting. Refer to Appendix for instructions and rubric. (Section of Syllabus: EVALUATION STRATEGIES for more details)</p>
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations.	CISO 6546 Social Determinants and Equity in Public Health	<p><u>Weekly critical annotations (learning assessment opportunity) Connecting the dots:</u> Through their weekly readings in Perusall, students must document (using multimedia) aspects of the social environment that affect the health of individuals and populations (the entries must conform to the topic assigned for each week). At the same time, students must articulate the possible mechanisms and circumstances that cause health inequities and discuss possible interventions to address these inequities. Students should</p>

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		propose solutions or approaches in a clear and respectful manner, recognizing the different interests that have a bearing on public health policies. (Section of Syllabus: EVALUATION STRATEGIES)
15. Evaluate policies for their impact on public health and health equity.	ADSS 6516 Fundamentals of Health Policy and Management in Public Health	<u>Policy Analysis</u> : This exercise requires students to explore a health policy topic from a variety of perspectives, using this information as a foundation for policy development and advocacy. The exercise engages students in learning about an issue and to accurately (in a non-biased fashion), identify the policy and political issues that are central to that topic. It is designed to provide students the opportunity to work in a group to prepare a policy brief. Students will receive formative evaluation of the progress reports, allowing them to improve the final product. The final policy brief will be graded. The final page count for the policy brief assignment is 5 pages minimum, 10 pages maximum, 12 point, Times New Roman font, 1" margins, double spaced, with page numbers included, and the group name listed on the paper. References are NOT included in the 10 page limit. The policy brief is a written document that conveys the Policy Issue, Background related to the Issue, Information pertinent to the Issue (this may include current law, debate about the issue (including ethical issues), use of evidence/data about the issue), Policy Options (including a discussion of policy making roles of the branches of government), student recommendation for Policy, and References. (Section of Syllabus: EVALUATION STRATEGIES)
	CISO 6546 Social Determinants and Equity in Public Health	<u>Policy Brief Evaluation</u> : Students are tasked with critically analyzing the results of a public policy implementation on public health and health equity. The brief must outline recommendations for policy changes incorporating use of persuasive arguments and critical thinking. Suggested topics for public policy brief evaluation include education, race/ethnicity, gender, housing, employment/working conditions, nutrition, and population health. (Section of Syllabus: EVALUATION STRATEGIES)
Leadership		
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making	SALP 6251 Leadership in Public Health	<u>Role Play</u> : The student will be given a document that outlines a real or imagined PH scenario. The learners will take on roles & act out an imagined or real scenario to demonstrate how to address cultural competency in communicating public health content, apply awareness of cultural values and practices to the design of implementation of public health policies or programs, identify stakeholders, and propose actions to build coalitions and partnerships, apply conflict resolution, mediation or negotiation techniques and apply collaboration and guiding decision-making techniques.

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>Exercise documents - Before implementing this educational experience, the students will receive two self-assessment questionnaires that they must complete and submit to the professor. They will also receive an informative document that describes public health situation, the competencies that we want to work on, the learning objectives and the procedures for the implementation of the exercise. The course instructor will assign the roles that the students will assume during the implementation of the exercise and will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students to play the role of negotiators. This semi-structured script considers principles linked to the development of cultural competence and facilitates the application of the Getting to Yes/The Harvard Principles of Negotiation model. Students will also receive a rubric to evaluate the exercise. This rubric must be completed by the course instructor and students.</p> <p>Pre implementation activities - Self-Assessments Questionnaires - Students will have time to prepare before class exercise and perform various activities. Specifically, prior to the exercise, participants must complete a Collaborative Leadership Self-Assessment Questionnaires and a Cultural Competency Self-Assessment. When the student completes the Cultural Competency Self-Assessment will be applying one of the principles of cultural competence: Conducting cultural self-assessment. Completing both self-assessments instruments will allow the student to think about on what their skills are and which ones they must reinforce during the implementation of the exercise. The results of the Self-Assessments Questionnaires must be completed and submitted to the professor prior to the implementation of the exercise. The students should also complete the reading of Chapter 23 Cultural Competence of Rowitz (2014), among other readings, links, and videos and study the negotiation model: Getting to Yes / The Harvard Principles of Negotiation.</p> <p>Roles and Diversity - During the implementation of the exercise, students will assume various roles and positions to address a public health situation. Some students will assume the role of mediators (a mediator as an impartial facilitator with no link to either party in a negotiation) and other students will perform the roles of negotiators (a negotiator that represents only one party, and his job is to make the best deal possible for that party. He/She is not expected to be impartial). To do this, the course instructor will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students that will</p>

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>assume the role of negotiators. Before the exercise, each student will know what their role is and what other parts will be represented in the exercise. The students will apply another principle of the cultural competence model [valuing diversity] after receiving the roles brief description. Specifically, the students must complete a diversity analysis. The participants prepare a document that identify all the organizations and/or groups represented in the exercise, carry out a review of literature on the positions historically assumed by these organizations and/or groups and describe the position of each party. The document must point out other groups that are not represented and should be included in the future. The students should consider the diversity of the Puerto Rican community according to the 2020 census for this analysis. Also, they must provide at least two cultural appropriate actions that could be applied in the design of strategies and programs. This analysis on the diversity among the organizations and/or groups represented in the exercise should be completed before the implementation of the exercise.</p> <p>Implementation - Negotiation Model - The negotiation model adopted in this exercise is: Getting to Yes / The Harvard Principles of Negotiation. All participants in the exercise must apply some principles of cultural competence and apply negotiation and mediation skills to address organizational or community challenges guided by the four principles proposed by this negotiation model. The semi-structured script and the rubric of the exercise will be provided by the course instructor. The semi-structured script and rubric will guide the students to apply some cultural competence principles and negotiation and mediation skills.</p> <p>Script/Semi-structured guide - The semi-structured script includes eight (8) parts. All participants in the exercise must apply some principles of cultural competence and the four principles proposed by the adopted negotiation model. First part of the script: The first part suggests a dialogue so that the students in the role of moderator offer a welcome to the group and share the rules of the meeting. In these meeting rules, students are encouraged to consider and apply awareness of cultural values and practices. From the second part to the fifth part, the script addresses the 4 principles of the Getting to Yes/The Harvard Principles of Negotiation and the students will have to apply them. (Principle # 1: Separate people from the problem, Principle # 2: Focus on interest, not position, Principle #3: Generate options for mutual benefits & Principle # 4: Use objective criteria). To do this, a suggested dialogue is provided for the moderators and the script also suggests questions that each of the negotiating participants must</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>answer to apply the four Principles of Negotiation. Sixth part of the script: The sixth part of the script has the purpose of provoking the reflection of the work group/community about stakeholders & coalitions. The moderator must ask the participants to propose at least 3 strategies to identify stakeholders that could be part of this group and 3 strategies to build a coalition towards this situation. In the seventh part of the script has the purpose of provoking the reflection of the work group/community about the cultural values and practices during de exercise. Finally, in this part of the script, the students establish an agreement and answer some questions. The final agreement and action plan reflect the contributions of our diverse cultural and social groups.</p> <p>Evidence and closure of the activity - A student, participating in the process, will take a minute/record to document all the issues, agreements, and the decision made by the group. Upon completing the implementation of the exercise, the instructor and students must complete the rubric. The implementation of the exercise must be recorded. Students must also complete some reflection questions about the educational activity and discuss it at the next class meeting. Refer to Appendix for instructions and rubric. (Section of Syllabus: EVALUATION STRATEGIES for mor details)</p>
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making.	SALP 6251 Leadership in Public Health	<p><u>Role Play:</u> The student will be given a document that outlines a real or imagined PH scenario. The learners will take on roles & act out an imagined or real scenario to demonstrate how to address cultural competency in communicating public health content, apply awareness of cultural values and practices to the design of implementation of public health policies or programs, identify stakeholders, and propose actions to build coalitions and partnerships, apply conflict resolution, mediation or negotiation techniques and apply collaboration and guiding decision-making techniques.</p> <p>Exercise documents - Before implementing this educational experience, the students will receive two self-assessment questionnaires that they must complete and submit to the professor. They will also receive an informative document that describes public health situation, the competencies that we want to work on, the learning objectives and the procedures for the implementation of the exercise. The course instructor will assign the roles that the students will assume during the implementation of the exercise and will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students to play the</p>

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>role of negotiators. This semi-structured script considers principles linked to the development of cultural competence and facilitates the application of the Getting to Yes/The Harvard Principles of Negotiation model. Students will also receive a rubric to evaluate the exercise. This rubric must be completed by the course instructor and students.</p> <p>Pre implementation activities - Self-Assessments Questionnaires - Students will have time to prepare before class exercise and perform various activities. Specifically, prior to the exercise, participants must complete a Collaborative Leadership Self-Assessment Questionnaires and a Cultural Competency Self-Assessment. When the student completes the Cultural Competency Self-Assessment will be applying one of the principles of cultural competence: Conducting cultural self-assessment. Completing both self-assessments instruments will allow the student to think about on what their skills are and which ones they must reinforce during the implementation of the exercise. The results of the Self-Assessments Questionnaires must be completed and submitted to the professor prior to the implementation of the exercise. The students should also complete the reading of Chapter 23 Cultural Competence of Rowitz (2014), among other readings, links, and videos and study the negotiation model: Getting to Yes / The Harvard Principles of Negotiation.</p> <p>Roles and Diversity - During the implementation of the exercise, students will assume various roles and positions to address a public health situation. Some students will assume the role of mediators (a mediator as an impartial facilitator with no link to either party in a negotiation) and other students will perform the roles of negotiators (a negotiator that represents only one party, and his job is to make the best deal possible for that party. He/She is not expected to be impartial). To do this, the course instructor will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students that will assume the role of negotiators. Before the exercise, each student will know what their role is and what other parts will be represented in the exercise. The students will apply another principle of the cultural competence model [valuing diversity] after receiving the roles brief description. Specifically, the students must complete a diversity analysis. The participants prepare a document that identify all the organizations and/or groups represented in the exercise, carry out a review of literature on the positions historically assumed by these organizations and/or groups and describe the position of each party. The document must point out other groups that are not represented and should be</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>included in the future. The students should consider the diversity of the Puerto Rican community according to the 2020 census for this analysis. Also, they must provide at least two cultural appropriate actions that could be applied in the design of strategies and programs. This analysis on the diversity among the organizations and/or groups represented in the exercise should be completed before the implementation of the exercise.</p> <p>Implementation - Negotiation Model - The negotiation model adopted in this exercise is: Getting to Yes / The Harvard Principles of Negotiation. All participants in the exercise must apply some principles of cultural competence and apply negotiation and mediation skills to address organizational or community challenges guided by the four principles proposed by this negotiation model. The semi-structured script and the rubric of the exercise will be provided by the course instructor. The semi-structured script and rubric will guide the students to apply some cultural competence principles and negotiation and mediation skills.</p> <p>Script/Semi-structured guide - The semi-structured script includes eight (8) parts. All participants in the exercise must apply some principles of cultural competence and the four principles proposed by the adopted negotiation model. First part of the script: The first part suggests a dialogue so that the students in the role of moderator offer a welcome to the group and share the rules of the meeting. In these meeting rules, students are encouraged to consider and apply awareness of cultural values and practices. From the second part to the fifth part, the script addresses the 4 principles of the Getting to Yes/The Harvard Principles of Negotiation and the students will have to apply them. (Principle # 1: Separate people from the problem, Principle # 2: Focus on interest, not position, Principle #3: Generate options for mutual benefits & Principle # 4: Use objective criteria). To do this, a suggested dialogue is provided for the moderators and the script also suggests questions that each of the negotiating participants must answer to apply the four Principles of Negotiation. Sixth part of the script: The sixth part of the script has the purpose of provoking the reflection of the work group/community about stakeholders & coalitions. The moderator must ask the participants to propose at least 3 strategies to identify stakeholders that could be part of this group and 3 strategies to build a coalition towards this situation. In the seventh part of the script has the purpose of provoking the reflection of the work group/community about the cultural values and practices during de exercise. Finally, in this part of the script, the students establish an</p>

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>agreement and answer some questions. The final agreement and action plan reflect the contributions of our diverse cultural and social groups.</p> <p>Evidence and closure of the activity - A student, participating in the process, will take a minute/record to document all the issues, agreements, and the decision made by the group. Upon completing the implementation of the exercise, the instructor and students must complete the rubric. The implementation of the exercise must be recorded. Students must also complete some reflection questions about the educational activity and discuss it at the next class meeting. Refer to Appendix for instructions and rubric. (Section of Syllabus: EVALUATION STRATEGIES for mor details)</p>
17. Apply negotiation and mediation skills to address organizational or community challenges.	SALP 6251 Leadership in Public Health	<p><u>Role Play:</u> The student will be given a document that outlines a real or imagined PH scenario. The learners will take on roles & act out an imagined or real scenario to demonstrate how to address cultural competency in communicating public health content, apply awareness of cultural values and practices to the design of implementation of public health policies or programs, identify stakeholders, and propose actions to build coalitions and partnerships, apply conflict resolution, mediation or negotiation techniques and apply collaboration and guiding decision-making techniques.</p> <p>Exercise documents - Before implementing this educational experience, the students will receive two self-assessment questionnaires that they must complete and submit to the professor. They will also receive an informative document that describes public health situation, the competencies that we want to work on, the learning objectives and the procedures for the implementation of the exercise. The course instructor will assign the roles that the students will assume during the implementation of the exercise and will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students to play the role of negotiators. This semi-structured script considers principles linked to the development of cultural competence and facilitates the application of the Getting to Yes/The Harvard Principles of Negotiation model. Students will also receive a rubric to evaluate the exercise. This rubric must be completed by the course instructor and students.</p> <p>Pre implementation activities - Self-Assessments Questionnaires - Students will have time to prepare before class exercise and perform various activities. Specifically, prior to the</p>

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>exercise, participants must complete a Collaborative Leadership Self-Assessment Questionnaires and a Cultural Competency Self-Assessment. When the student completes the Cultural Competency Self-Assessment will be applying one of the principles of cultural competence: Conducting cultural self-assessment. Completing both self-assessments instruments will allow the student to think about on what their skills are and which ones they must reinforce during the implementation of the exercise. The results of the Self-Assessments Questionnaires must be completed and submitted to the professor prior to the implementation of the exercise. The students should also complete the reading of Chapter 23 Cultural Competence of Rowitz (2014), among other readings, links, and videos and study the negotiation model: Getting to Yes / The Harvard Principles of Negotiation.</p> <p>Roles and Diversity - During the implementation of the exercise, students will assume various roles and positions to address a public health situation. Some students will assume the role of mediators (a mediator as an impartial facilitator with no link to either party in a negotiation) and other students will perform the roles of negotiators (a negotiator that represents only one party, and his job is to make the best deal possible for that party. He/She is not expected to be impartial). To do this, the course instructor will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students that will assume the role of negotiators. Before the exercise, each student will know what their role is and what other parts will be represented in the exercise. The students will apply another principle of the cultural competence model [valuing diversity] after receiving the roles brief description. Specifically, the students must complete a diversity analysis. The participants prepare a document that identify all the organizations and/or groups represented in the exercise, carry out a review of literature on the positions historically assumed by these organizations and/or groups and describe the position of each party. The document must point out other groups that are not represented and should be included in the future. The students should consider the diversity of the Puerto Rican community according to the 2020 census for this analysis. Also, they must provide at least two cultural appropriate actions that could be applied in the design of strategies and programs. This analysis on the diversity among the organizations and/or groups represented in the exercise should be completed before the implementation of the exercise.</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>Implementation - Negotiation Model - The negotiation model adopted in this exercise is: Getting to Yes / The Harvard Principles of Negotiation. All participants in the exercise must apply some principles of cultural competence and apply negotiation and mediation skills to address organizational or community challenges guided by the four principles proposed by this negotiation model. The semi-structured script and the rubric of the exercise will be provided by the course instructor. The semi-structured script and rubric will guide the students to apply some cultural competence principles and negotiation and mediation skills.</p> <p>Script/Semi-structured guide - The semi-structured script includes eight (8) parts. All participants in the exercise must apply some principles of cultural competence and the four principles proposed by the adopted negotiation model. First part of the script: The first part suggests a dialogue so that the students in the role of moderator offer a welcome to the group and share the rules of the meeting. In these meeting rules, students are encouraged to consider and apply awareness of cultural values and practices. From the second part to the fifth part, the script addresses the 4 principles of the Getting to Yes/The Harvard Principles of Negotiation and the students will have to apply them. (Principle # 1: Separate people from the problem, Principle # 2: Focus on interest, not position, Principle #3: Generate options for mutual benefits & Principle # 4: Use objective criteria). To do this, a suggested dialogue is provided for the moderators and the script also suggests questions that each of the negotiating participants must answer to apply the four Principles of Negotiation. Sixth part of the script: The sixth part of the script has the purpose of provoking the reflection of the work group/community about stakeholders & coalitions. The moderator must ask the participants to propose at least 3 strategies to identify stakeholders that could be part of this group and 3 strategies to build a coalition towards this situation. In the seventh part of the script has the purpose of provoking the reflection of the work group/community about the cultural values and practices during de exercise. Finally, in this part of the script, the students establish an agreement and answer some questions. The final agreement and action plan reflect the contributions of our diverse cultural and social groups.</p> <p>Evidence and closure of the activity - A student, participating in the process, will take a minute/record to document all the issues, agreements, and the decision made by the group. Upon completing the implementation of the exercise, the instructor and students must complete the rubric. The implementation of the exercise must be recorded. Students must also complete some reflection questions about the educational activity</p>

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		and discuss it at the next class meeting. Refer to Appendix for instructions and rubric. (Section of Syllabus: EVALUATION STRATEGIES for more details)
Communication		
18. Select communication strategies for different audiences and sectors.	INTD 6996 Interprofessional Collaboration Practice in Public Health	<u>Case study analysis:</u> The student will prepare a professional quality Power Point presentation and present a professional level oral presentation covering the major components of case study analysis and recommendations; strengths, weaknesses and lessons learned of the learning experience. As part of case study analysis, student will communicate intervention strategies to patients, families, communities, and professionals in health and other fields in a responsive appropriate manner that supports the promotion and maintenance of health and the prevention and treatment of disease regardless their level of understanding and educational backgrounds. Upon completing the implementation of the exercise, the instructor must complete the rubric and students the self-assessment. The implementation of the exercise must be recorded. Each student must also complete a reflective exercise related to educational activity as part of individual evaluation of his/her performance. (Section of Syllabus: EVALUATION STRATEGIES)
19. Communicate audience-appropriate public health content, both in writing and through oral presentation.	EDSA 6573 Assessment and Planning in Health Promotion and Health Education	<u>Health Education and Health Promotion Program Planning Written Proposal and Oral Presentation</u> Written Proposal: Health Education and Health Promotion Program Planning Proposal: The student will develop a plan that addresses one of the identified health needs & cultural values & practices of the chosen target population through health education based on the findings from the assessment, other professional literature, and resources. The proposal must include the following steps: (1) identify the health and social needs of a particular community (2) describe policies that impact public health and health equity, (3) select a vision, mission, goal/s and objectives of the program, (4) describe the importance of cultural competence in intervention planning, (5) apply the theoretical constructs to address a health or social need of a particular community group, (6) describe at least three health education interventions using health education principles, strategies, methods, and techniques to promote learning and change, two health communication interventions and one intersectoral collaboration action for health promotion & (6) select methods to evaluate the program. For need assessment the student will assess population needs, assets, capacities and cultural values and practices that affect a community. The population needs, assets, capacities and cultural values and practices that affect a community must describe (in narrative and a figure) the assessment carried out according to Phases 1-4 of the PRECEDE-PROCEDE model by

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Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
		<p>Lawrence Green or use Phase 1 and Phase 2 of the Simmons-Morton (1998) Multilevel Approach to Community Health (MATCH) planning model. The student will describe the methodology used to collect the data/information. The assessment must include at least secondary data analysis and informal conversations with key people. The student must present a secondary data analysis of the national core documents and statistics at the national and/or regional level and qualitative analysis of informal conversations with key people who are working with the community and with people from the community. The student must include all the areas, you must assess population needs as suggested in the planning model and must assess the capacities and cultural values and practices that affect a community. (Section of Syllabus: EVALUATION STRATEGIES for more details)</p> <p>Oral Presentation - The student will present Health Education and Health Promotion Proposal. The student will prepare a professional quality Power Point presentation and deliver a professional level oral presentation covering the main components. Students will make the oral presentation to peers/fellow students, course instructor, and at least 2 field health educators who have graduated from the Master in Public Health Education. The oral presentation considers the following criteria: content, organization, grammar and spelling, visual design, speaking skills, eye contact, personal appearance, and length. The peer/fellow student, course instructor, and the 2 field health educators that receive the proposal will have to complete the rubric of the oral presentation. (Section of Syllabus: EVALUATION STRATEGIES)</p>
20. Describe the importance of cultural competence in communicating public health content.	SALP 6251 Leadership in Public Health	<p><u>Six Minutes Paper Exercise</u>: Students will answer 6 questions related to the things that they have learned in the class or the treated topic. (1) Why is important consider cultural diversity in my community or an organization? (2) Why is important apply skills of cultural competence in communicating public health content? (3) How can we address issues with community members in a culturally appropriate manner? (4) Are we open to learning from others regardless of status or role? (5) Do we value community members' expertise regarding their community and how best to interact with these members? (6) How will the decision reflect the cultural values of our community? (Section of Syllabus: EVALUATION STRATEGIES)</p>
Interprofessional Practice		
21. Perform effectively on interprofessional teams.	INTD 6996 Interprofessional	<p><u>Case study analysis</u>: The student will prepare a professional quality Power Point presentation and present a professional level oral presentation covering the major components of case study analysis and recommendations; strengths, weaknesses and</p>

TABLE D2.2.b Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)*	Describe specific assessment opportunity ⁿ
	Collaboration Practice in Public Health	<p>lessons learned of the learning experience. As part of case study analysis, student will communicate intervention strategies to patients, families, communities, and professionals in health and other fields in a responsive appropriate manner that supports the promotion and maintenance of health and the prevention and treatment of disease regardless their level of understanding and educational backgrounds. Upon completing the implementation of the exercise, the instructor must complete the rubric and students the self-assessment. The implementation of the exercise must be recorded. Each student must also complete a reflective exercise related to educational activity as part of individual evaluation of his/her performance. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Reflective essay:</u> Each student must develop an essay about their personal and professional reactions to the Interprofessional experience and the lessons learned. They must elaborate on how has proven their leadership and teamwork skills regarding a critical issue or concern of the case study analysis. (Section of Syllabus: EVALUATION STRATEGIES)</p>
Systems Thinking		
22. Apply systems thinking tools to a public health issue.	SAAM 6528 Principles of Environmental Public Health	<p><u>System Thinking Tools Concept Maps:</u> Students will represent in circles or boxes different types of environmental exposures and the concepts of: assessment, prevention, controlling, exposure pathways, exposure measurement, exposure and risk environmental assessment and methods, for the represented environmental hazards. Through lines, words, and phrases they will link and integrate these concepts to explain the relationship between them.</p> <p>Multiple cause-multiple effects diagram-Students will draw a diagram to represent different aspects of a particular environmental exposure or hazard and their consequential effects on human and public health. Then students will be required to present orally the explanation of the diagram. Input-output diagram-Using an input-output diagram, students will represent human actions that contribute to climate change and its consequent impacts to the environment and public health. (Section of Syllabus: EVALUATION STRATEGIES)</p>

- 3) **Include the most recent syllabus from each course listed in Template D2-1, or written guidelines, such as a handbook, for any required elements listed in Template D2-1 that do not have a syllabus. (electronic resource file)**

Core course syllabus included in the **Electronic Resource File D2.3**

- 4) **If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

Strengths

- Students are expected to attain knowledge and competencies in the basic public health content areas. Competencies are covered in multiple courses. Through this strategy, the MPH programs have curriculums that allow for the introduction and reinforcement of competencies. Academic curriculums are designed and aligned to complement each competency. In addition, students can get involved in a combination of tasks that provide them integration of the Public Health knowledge required from a global perspective. As part of the new curriculum, all MPH students are required to complete the INTD 6996- Interprofessional Collaborative Practice in Public Health course which exposes students to interprofessional education.

Weaknesses

- Need to improve the data collection for the learning assessment opportunities. This implies implementing strategies that allow the gathering of quarterly information in a more efficient manner.

Lessons Learned

- The new curriculum was implemented during the last two years. However, we are constantly evaluating the curriculum to improve the ways to better address competency assessment. In this process, tools have been generated to evaluate the curriculum of programs.

D3. DRPH FOUNDATIONAL COMPETENCIES

The DrPH is the professional doctoral degree in public health, designed to produce transformative academic and practice leaders with expertise in evidence-based public health practice and research. These individuals are able to convene diverse partners; communicate to effect change across a range of sectors and settings; synthesize and translate findings; and generate practice-based evidence that advances programs, policies, services and/or systems addressing population health. DrPH graduates demonstrate the competencies defined in this criterion. The school or program documents at least one specific, required assessment activity (eg, component of existing course, paper, presentation, test) for each competency below, during which faculty or other qualified individuals (eg, preceptors) validate the student's ability to perform the competency. Assessment opportunities may occur in foundational courses that are common to all students, in courses that are required for a concentration or in other educational requirements outside of designated coursework, but the school or program must assess all DrPH students, at least once, on each competency. Assessment may occur in simulations, group projects, presentations, written products, etc.

- 1) List the coursework and other learning experiences required for the school or program's DrPH degrees. Information may be provided in the format of Template D3-1 or in hyperlinks to student handbooks or webpages, but the documentation must present a clear depiction of the requirements for each DrPH degree. (self-study document)

TABLE D3.1.a. DrPH-Environmental Health Curriculum	
CURRICULUM	Credits
<i>CORE</i>	
SALP 8005 Health Promotion Seminar	2
BIOE8005 Advanced Methods in Biostatistics	3
EPID 8002 Advanced Methods in Epidemiology	3
CISO 8005 Culture, Social Inequity, and Community Health	3
SALP 8106 Research Design Approaches For Public Health	3
ADSS 8011 Health Systems and Policy	3
ADSS 8105 Applied Public Health Leadership Seminar	2
ADSS 8008 Health Systems Planning and Strategic Management	3
SAAM 8027 Environmental Public Health Of Urban Communities	2
SALP 8026 Public Health Leader as Educator	3
<i>SPECIALTY</i>	
SAAM 8120 Changing Climate: A Public Health Response	3
SAAM 8119 Exposure Assessment for Environmental Public Health	2
SAAM 8118 Prevention and Control of Environmental Hazards: A system thinking approach	3
SAAM 8017 Health Risk Assessment	3
SAAM 8015 Global Changes, Health, and International Legislation	3
SAAM 8016 Environmental Policy and Management	3
SAAM 8995 Environmental Health Doctoral Research Seminar I	1
SAAM 8996 Environmental Health Doctoral Research Seminar II	1

TABLE D3.1.a. DrPH-Environmental Health Curriculum	
CURRICULUM	Credits
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
SALP 8006 Doctoral Applied Practice Experience in Public Health	0/200 hrs
SAAM 8198 Dissertation Proposal in Environmental Health	3
SAAM 8199 Doctoral Dissertation in Environmental Health	3
<i>ELECTIVES</i>	
Electives	3
TOTAL	55+ 200 hours

TABLE D3.1.b. DrPH-Health System Analysis and Management Curriculum	
CURRICULUM	Credits
<i>CORE</i>	
BIOE8005 Advance Methods in Biostatistics	3
EPID 8002 Advanced Methods in Epidemiology	3
CISO 8005 Culture, Social Inequity, and Community Health	3
ADSS 8011 Health Systems and Policy	3
SAAM 8027 Environmental Public Health of Urban Communities	2
ADSS 8105 Applied Public Health Leadership Seminar	2
ADSS 8008 Health Systems Planning and Strategic Management	3
SALP 8106 Research Design Approaches For Public Health	3
SALP 8026 Public Health Leader as Educator	3
SALP 8005 Health Promotion Seminar	2
<i>SPECIALTY</i>	
ADSS 8007 Health Policy	3
ADSS 8010 Organizational Development and Change in Health Service Organizations	3
ADSS 8006 Health Law	3
ADSS 8206 Economic Analysis for Health Systems Management in Health Systems	3
ADSS 8009 Measurement of Quality and Outcomes in Health Systems	2
ADSS 8307 Health Services Evaluation	2
ADSS 8205 Financial Management in Health Systems	3
ADSS 8305 Health Services Research	2
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
SALP 8006 Doctoral Applied Practice Experience in Public Health	0/200 hrs
ADSS 8306 Dissertation Proposal in Health Systems Analysis and Management	3
ADSS 8401 Doctoral Dissertation in Health Systems Analysis and Management	3
<i>ELECTIVES</i>	
Electives	3
TOTAL	57 + 200 hours

TABLE D3.1.c DrPH-Social Determinants of Health Curriculum	
CURRICULUM	Credits
<i>CORE</i>	
BIOE8005 Advance Methods in Biostatistics	3
EPID 8002 Advanced Methods in Epidemiology	3
CISO 8005 Culture, Social Inequity, and Community Health	3
ADSS 8011 Health Systems and Policy	3
SAAM 8027 Environmental Public Health of Urban Communities	2
ADSS 8105 Applied Public Health Leadership Seminar	2
ADSS 8008 Health Systems Planning and Strategic Management	3
SALP 8106 Research Design Approaches For Public Health	3
SALP 8026 Public Health Leader as Educator	3
SALP 8005 Health Promotion Seminar	2
<i>SPECIALTY</i>	
DESS 8011 Social Determinants of Health Graduate Seminar I	1
DESS 8012 Social Determinants of Health Graduate Seminar II	2
DESS 8105 Social Theory and Public Health	3
DESS 8201 Qualitative Methods in Social Determinants of Health	3
DESS 8202 Statistical Measurement and Argumentation in Social Determinants of Health	3
DESS 8206 Community Building and Action on the Social Determinants of Health	3
DESS 8208 Political Economy of Health	3
DESS 8305 Health and Social Policy Analysis	3
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
SALP 8006 Doctoral Applied Practice Experience in Public Health	0/200 hrs
DESS 8198 Doctoral Proposal in Social Determinants of Health	3
DESS 8199 Doctoral Dissertation in Social Determinants of Health	3
<i>ELECTIVES</i>	
Electives	3
TOTAL	57 200 hours

- 2) Provide a matrix, in the format of Template D3-2, that indicates the assessment activity for each of the foundational competencies listed above (1-20). If the school or program addresses all of the listed foundational competencies in a single, common core curriculum, the school or program need only present a single matrix. If the school or program relies on concentration-specific courses to assess some of the foundational competencies listed above, the school or program must present a separate matrix for each concentration. (self-study document)

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
Data & Analysis		
1. Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community, and population) levels.	SALP 8106 Research Design Approaches for Public Health	<u>Research Proposal-Comparative Methodological Approaches Project:</u> Students will develop this group project based on a previously identified public health problem. Groups will have a maximum of three students, preferably from different DrPH specialties. Students must develop a written document in which they include a comparison between at least three of the five methodological approaches presented in class (i.e., qualitative, quantitative, mixed methods, policy analysis, or evaluation). They must elaborate on how the research problem would be addressed from each approach. Students must consider the following areas: (1) Research question, (2) Potential hypotheses (if applicable), (3) Sampling and participant recruitment, (4) Measures, (5) Data collection/ source process. Oral presentation - At the end of the trimester, students will present to their peers a summary of the selected approaches emphasizing on their contrasts. They will provide a rationale explaining which of the approaches would be the best option to address the research topic. (Section of Syllabus: EVALUATION STRATEGIES)
	BIOE 8005 Advanced Methods in Biostatistics	<u>Research proposal</u> Develop a research proposal to evaluate an exposure possibly related to a specific disease with the following content: Introduction, risk factors, prevalence or incidence, Justification, Objectives of the Study, Study population, Design of epidemiological study, Define the study group, the method of data collection, Study variables, Statistical Analysis and measures, use of the logistic regression model to carry out the evaluation of the magnitude of the association, interaction or modification of the effect (formal and informal test). If applicable, describe the process to identify the existence of the confounding effect and its impact with the over- or sub-estimate of the crude OR in comparison to the adjusted OR. Sample size and statistical power. Conclusions: Indicate the feasibility and limitations to carry out this study. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
2. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue.	SALP 8106 Research Design Approaches for Public Health	<u>Research Proposal-Comparative Methodological Approaches Project:</u> Students will develop this group project based on a previously identified public health problem. Groups will have a maximum of three students, preferably from different DrPH specialties. Students must develop a written document in which they include a comparison between at least three of the five methodological approaches presented in class (i.e., qualitative, quantitative, mixed methods, policy analysis, or evaluation). They must elaborate on how the research problem would be addressed from each approach. Students must consider the following areas: (1) Research question, (2) Potential hypotheses (if applicable), (3) Sampling and participant recruitment, (4) Measures, (5) Data collection/ source process. Oral presentation - At the end of the trimester, students will present to their peers a summary of the selected approaches emphasizing on their contrasts. They will provide a rationale explaining which of the approaches would be the best option to address the research topic. (Section of Syllabus: EVALUATION STRATEGIES)
	BIOE 8005 Advanced Methods in Biostatistics	<u>Research proposal:</u> Develop a research proposal to evaluate an exposure possibly related to a specific disease with the following content: Introduction, risk factors, prevalence or incidence, Justification, Objectives of the Study, Study population, Design of epidemiological study, Define the study group, the method of data collection, Study variables, Statistical Analysis and measures, use of the logistic regression model to carry out the evaluation of the magnitude of the association, interaction or modification of the effect (formal and informal test). If applicable, describe the process to identify the existence of the confounding effect and its impact with the over- or sub-estimate of the crude OR in comparison to the adjusted OR. Sample size and statistical power. Conclusions: Indicate the feasibility and limitations to carry out this study. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
3. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring, and evaluating policies and programs and to address a population's health.	EPID 8002 Advanced Methods in Epidemiology	<u>Debates:</u> The debate will emphasize on methodological or surveillance issues with arguments in favor or against a specific public health issue. There must be at least two sides to the topic. The team that has been assigned to agree with the topic is called the 'proposition'; the team on the other side is called the 'opposition'. The professor will usually identify three or four speakers for each team. To 'mobilize' the rest of the group for the debate, the professor may assign tasks such as conducting research into the topic to provide support for the speakers. This ensures that each student is involved somehow and optimizes participation among group members. Speakers in a debate have well-defined roles. At the end of the day, a larger majority of students would have obtained a better grasp of the topic and learnt not only more, but more effectively. (Section of Syllabus: EVALUATION STRATEGIES for more details)
Leadership, Management & Governance		
4. Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders and other partners.	CISO 8005 Culture, Social Inequity and Community Health	<u>Social Equity and Health Case Study:</u> Students must choose a course topic, conduct bibliographic research, prepare and present a written case study analysis on social equity and health. Based on the analysis of the case study, student will propose specific recommendations considering organizing stakeholders and specific strategies to promote social equity. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 8027 Environmental Public Health of Urban Communities	<u>Critical Essay:</u> The student will develop a critical essay related to the ideal city for the promotion, conservation, and thriving of human health. Students will integrate the knowledge developed throughout the course on the effects of the social environment on public health using scientific information, legal and regulatory approaches, and the principles of environmental public health. Also, students must highlight the importance of stakeholders in the analysis and development of public policies to achieve the ideal city.__(Section of Syllabus: EVALUATION STRATEGIES)

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
5. Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies.	ADSS 8105 Applied Public Health Leadership Seminar	<u>First Message in a Public Health Emergency</u> : Students will write their first message in a Public Health Emergency to diverse stakeholders and community. This exercise will allow students to write immediate communications after the onset of an emergency for purpose of influencing behaviors. These messages can be used by staff answering phones, news releases, talking points, and any other communication efforts to enforce policies immediately following the identification of an emergency situation. (Section of Syllabus: EVALUATION STRATEGIES)
6. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems.	ADSS 8011 Health Systems and Policy	<u>Health Policy's Analysis Essay</u> : In the Essay, students are expected to identify and explain the positive integration of public health in the health system. In the narrative, the student should demonstrate an understanding of the role, function, and settings of public health by national, regional, and local agencies. The student will also be able to exhibit analyzing and evaluating health systems from different countries, specifically models and approaches to improve the health system outcomes considering cultural values. The paper must also compare and contrast their findings with the health policy statements of the Pan American Health Organization, the World Health Organization, and the European Community. In this manner, students acquire a global perspective of health policy in addition to the experience of Puerto Rico and the United States. (Section of Syllabus: EVALUATION STRATEGIES)
	SALP 8005 Health Promotion Seminar	<u>Sustainable Development Objectives/Situational Analysis</u> : Students will select one of PAHOs objectives of Sustainable Development and develop a social and health situation analysis in Puerto Rico using theoretical-conceptual, operational, methodological, and practical experience in the field of Health Promotion. Based on the social and health situational analysis, students will outline the design of integrated systemic strategies to address the Sustainability Objective selected and the public health issues associated with it. The analysis and strategies

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		will be addressed from an intersectorial /interprofessional approach. (Section of Syllabus: EVALUATION STRATEGIES)
7. Create a strategic plan.	ADSS 8008 Health Systems Planning and Strategic Management	<p><u>Individual Conceptualization of Scenario Construction:</u> This assignment requires the student to submit a 3-page, single space written report in which he/she individually presents 3 potential future scenarios regarding the public health problem addressed. This assessment must be based on the scenario construction and planning model examined in this course. Such definition should rely on sound judgement based on statistics and literature to justify the narrative presented. The problem should be expressed in terms of the population affected, the geographic distribution and the implications of the problem with its short-term and long-term consequences. Considerations include the social, economic, political, demographic and public health dimensions of the problem. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Individual Conceptualization of Strategy Formulation:</u> This assignment requires the student to submit a 3-page, single space written report in which he/she individually identifies and evaluates 3 potential strategies regarding the public health problem selected for planning purposes and select the preferred one. This assessment must be based on the scenario construction/planning model, the strategy typology by Ginter et al. studied in class, and the student's critical thinking and creative capabilities. Such definition should rely on sound judgement based on statistics and literature to justify the narrative presented. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Elaboration of a Strategic Plan:</u> Students organized as work teams will choose an organization / institution relevant to the systemic health issue identified in their "scenario construction" as a base to formulate, evaluate select a strategy (or strategies) which lead toward an implementation workplan as part of a complete strategic plan. The</p>

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p>objective is for student teams to create a strategic and action plan in a step-wise methodological fashion that contains organizational change strategies that help the organization / institution more effectively and efficiently address the health issue. The strategic plan must contain at least one innovative strategy for new resources or revenue streams to sustain at least one of the strategic goals in the plan. The strategic plan contains the following steps: first defining the public health problem in its most relevant dimensions and the organizations role in tackling it, secondly developing the strategy analysis of the organization in addressing the issue and identifying potential resources for its implementation; and third, formulating an implementation/evaluation plan. The implementation plan will include human, fiscal and other resources to achieve a strategic goal. These plans will be presented orally in class to peer/fellow student, course instructor, and representatives of the organization and submitted to the instructor as a final written report by the end of the term. (Section of Syllabus: EVALUATION STRATEGIES)</p>
8. Facilitate shared decision making through negotiation and consensus-building methods.	ADSS 8105 Applied Public Health Leadership Seminar	<p><u>Role Play:</u> The student will be given a document that outlines a real or imagined PH scenario. The learners will take on roles & act out an imagined or real scenario to demonstrate how to address cultural competency in communicating public health content, apply awareness of cultural values and practices to the design of implementation of public health policies or programs, identify stakeholders, and propose actions to build coalitions and partnerships, apply conflict resolution, mediation or negotiation techniques and apply collaboration and guiding decision-making techniques by consensus.</p> <p>Exercise documents - Before implementing this educational experience, the students will receive two self-assessment questionnaires that they must complete and submit to the professor. They will also receive an informative document that describes public health situation, the competencies that we want to work on, the learning objectives and the procedures for the implementation of the exercise. The course instructor will assign the roles that the students will assume during the implementation of the exercise and will provide a brief description of each character. A semi-structured script will also</p>

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p>be provided to students in the role of mediators and an action guide for students to play the role of negotiators. This semi-structured script considers principles linked to the development of cultural competence and facilitates the application of the Getting to Yes/The Harvard Principles of Negotiation model. Students will also receive a rubric to evaluate the exercise. This rubric must be completed by the course instructor and students.</p> <p>Pre implementation activities - Self-Assessments Questionnaires - Students will have time to prepare before class exercise and perform various activities. Specifically, prior to the exercise, participants must complete a Collaborative Leadership Self-Assessment Questionnaires and a Cultural Competency Self-Assessment. When the student completes the Cultural Competency Self-Assessment will be applying one of the principles of cultural competence: Conducting cultural self-assessment. Completing both self-assessments instruments will allow the student to think about on what their skills are and which ones they must reinforce during the implementation of the exercise. The results of the Self-Assessments Questionnaires must be completed and submitted to the professor prior to the implementation of the exercise. The students should also complete the reading of Chapter 23 Cultural Competence of Rowitz (2014), among other readings, links, and videos and study the negotiation model: Getting to Yes / The Harvard Principles of Negotiation.</p> <p>Roles and Diversity - During the implementation of the exercise, students will assume various roles and positions to address a public health situation. Some students will assume the role of mediators (a mediator as an impartial facilitator with no link to either party in a negotiation) and other students will perform the roles of negotiators (a negotiator that represents only one party, and his job is to make the best deal possible for that party. He/She is not expected to be impartial). To do this, the course instructor will provide a brief description of each character. A semi-structured script will also be provided to students in the role of mediators and an action guide for students that will assume the role of negotiators. Before the exercise, each student will know what their role is and what other parts will be represented in the exercise. The students will apply another principle of the cultural competence model [valuing diversity] after receiving the roles brief description. Specifically, the students</p>

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p>must complete a diversity analysis. The participants prepare a document that identify all the organizations and/or groups represented in the exercise, carry out a review of literature on the positions historically assumed by these organizations and/or groups and describe the position of each party. The document must point out other groups that are not represented and should be included in the future. The students should consider the diversity of the Puerto Rican community according to the 2020 census for this analysis. Also, they must provide at least two cultural appropriate actions that could be applied in the design of strategies and programs. This analysis on the diversity among the organizations and/or groups represented in the exercise should be completed before the implementation of the exercise.</p> <p>Implementation - Negotiation Model - The negotiation model adopted in this exercise is: Getting to Yes / The Harvard Principles of Negotiation. All participants in the exercise must apply some principles of cultural competence and apply negotiation and mediation skills to address organizational or community challenges guided by the four principles proposed by this negotiation model. The semi-structured script and the rubric of the exercise will be provided by the course instructor. The semi-structured script and rubric will guide the students to apply some cultural competence principles and negotiation and mediation skills.</p> <p>Script/Semi-structured guide - The semi-structured script includes eight (8) parts. All participants in the exercise must apply some principles of cultural competence and the four principles proposed by the adopted negotiation model. First part of the script: The first part suggests a dialogue so that the students in the role of moderator offer a welcome to the group and share the rules of the meeting. In these meeting rules, students are encouraged to consider and apply awareness of cultural values and practices. From the second part to the fifth part, the script addresses the 4 principles of the Getting to Yes/The Harvard Principles of Negotiation and the students will have to apply them. (Principle # 1: Separate people from the problem, Principle # 2: Focus on interest, not position, Principle #3: Generate options for mutual benefits & Principle # 4: Use objective criteria). To do this, a suggested dialogue is provided for the moderators and the script also suggests questions that each</p>

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p>of the negotiating participants must answer to apply the four Principles of Negotiation. Sixth part of the script: The sixth part of the script has the purpose of provoking the reflection of the work group/community about stakeholders & coalitions. The moderator must ask the participants to propose at least 3 strategies to identify stakeholders that could be part of this group and 3 strategies to build a coalition towards this situation. In the seventh part of the script has the purpose of provoking the reflection of the work group/community about the cultural values and practices during de exercise. Finally, in this part of the script, the students establish an consensus agreement and answer some questions. The final agreement and action plan reflect the contributions of our diverse cultural and social groups.</p> <p>Evidence and closure of the activity - A student, participating in the process, will take a minute/record to document all the issues, agreements, and the decision made by the group. Upon completing the implementation of the exercise, the instructor and students must complete the rubric. The implementation of the exercise must be recorded. Students must also complete some reflection questions about the educational activity and discuss it at the next class meeting. Refer to Appendix for instructions and rubric. (Section of Syllabus: EVALUATION STRATEGIES for more details)</p>
9. Create organizational change strategies.	ADSS 8008 Health Systems Planning and Strategic Management	<p><u>Individual Conceptualization of Scenario Construction:</u> This assignment requires the student to submit a 3-page, single space written report in which he/she individually presents 3 potential future scenarios regarding the public health problem addressed. This assessment must be based on the scenario construction and planning model examined in this course. Such definition should rely on sound judgement based on statistics and literature to justify the narrative presented. The problem should be expressed in terms of the population affected, the geographic distribution and the implications of the problem with its short-term and long-term consequences. Considerations include the social, economic, political, demographic and public health dimensions of the problem. (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p><u>Individual Conceptualization of Strategy Formulation:</u> This assignment requires the student to submit a 3-page, single space written report in which he/she individually identifies and evaluates 3 potential strategies regarding the public health problem selected for planning purposes and select the preferred one. This assessment must be based on the scenario construction/planning model, the strategy typology by Ginter et al. studied in class, and the student's critical thinking and creative capabilities. Such definition should rely on sound judgement based on statistics and literature to justify the narrative presented. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Elaboration of a Strategic Plan:</u> Students organized as work teams will choose an organization / institution relevant to the systemic health issue identified in their "scenario construction" as a base to formulate, evaluate select a strategy (or strategies) which lead toward an implementation workplan as part of a complete strategic plan. The objective is for student teams to create a strategic and action plan in a step-wise methodological fashion that contains organizational change strategies that help the organization / institution more effectively and efficiently address the health issue. The strategic plan must contain at least one innovative strategy for new resources or revenue streams to sustain at least one of the strategic goals in the plan. The strategic plan contains the following steps: first defining the public health problem in its most relevant dimensions and the organizations role in tackling it, secondly developing the strategy analysis of the organization in addressing the issue and identifying potential resources for its implementation; and third, formulating an implementation/evaluation plan. The implementation plan will include human, fiscal and other resources to achieve a strategic goal. These plans will be presented orally in class to peer/fellow student, course instructor, and representatives of the organization and submitted to the instructor as a</p>

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		final written report by the end of the term. (Section of Syllabus: EVALUATION STRATEGIES)
10. Propose strategies to promote inclusion and equity within public health programs, policies, and systems.	CISO 8005 Culture, Social Inequity and Community Health	<u>Social Equity and Health Case Study</u> Students must choose a course topic, conduct bibliographic research, prepare, and present a written case study analysis on social equity and health. Based on the analysis of the case study, student will propose specific recommendations considering organizing stakeholders and specific strategies to promote social equity. (Section of Syllabus: EVALUATION STRATEGIES)
11. Assess one's own strengths and weaknesses in leadership capacities including cultural proficiency.	ADSS 8105 Applied Public Health Leadership Seminar	<u>The Leader I have become Essay</u> : Prompt reflection of what make you a leader and discuss the leadership values, skills and attitudes that guide your development plan. This last session exercise will facilitate the student to assess own competencies, values, skills and attitudes as a potential leader, strengths, and areas for improvement. (Section of Syllabus: EVALUATION STRATEGIES)
12. Propose human, fiscal, and other resources to achieve a strategic goal.	ADSS 8008 Health Systems Planning and Strategic Management	<u>Elaboration of a Strategic Plan</u> : Students organized as work teams will choose an organization / institution relevant to the systemic health issue identified in their "scenario construction" as a base to formulate, evaluate select a strategy (or strategies) which lead toward an implementation workplan as part of a complete strategic plan. The objective is for student teams to create a strategic and action plan in a step-wise methodological fashion that contains organizational change strategies that help the organization / institution more effectively and efficiently address the health issue. The strategic plan must contain at least one innovative strategy for new resources or revenue streams to sustain at least one of the strategic goals in the plan. The strategic plan contains the following steps: first defining the public health problem in its most relevant dimensions and the organizations role in tackling it, secondly developing the strategy analysis of the organization in addressing the issue and identifying potential resources for its implementation; and third, formulating an implementation/evaluation

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		plan. The implementation plan will include human, fiscal and other resources to achieve a strategic goal. These plans will be presented orally in class to peer/fellow student, course instructor, and representatives of the organization and submitted to the instructor as a final written report by the end of the term. (Section of Syllabus: EVALUATION STRATEGIES)
13. Cultivate new resources and revenue streams to achieve a strategic goal.	ADSS 8008 Health Systems Planning and Strategic Management	<u>Elaboration of a Strategic Plan:</u> Students organized as work teams will choose an organization / institution relevant to the systemic health issue identified in their “scenario construction” as a base to formulate, evaluate select a strategy (or strategies) which lead toward an implementation workplan as part of a complete strategic plan. The objective is for student teams to create a strategic and action plan in a step-wise methodological fashion that contains organizational change strategies that help the organization / institution more effectively and efficiently address the health issue. The strategic plan must contain at least one innovative strategy for new resources or revenue streams to sustain at least one of the strategic goals in the plan. The strategic plan contains the following steps: first defining the public health problem in its most relevant dimensions and the organizations role in tackling it, secondly developing the strategy analysis of the organization in addressing the issue and identifying potential resources for its implementation; and third, formulating an implementation/evaluation plan. The implementation plan will include human, fiscal and other resources to achieve a strategic goal. These plans will be presented orally in class to peer/fellow student, course instructor, and representatives of the organization and submitted to the instructor as a final written report by the end of the term. (Section of Syllabus: EVALUATION STRATEGIES)
Policy & Programs		

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
14. Design a system-level intervention to address a public health issue.	SALP 8005 Health Promotion Seminar	<u>Sustainable Development Objectives/Situational Analysis:</u> Students will select one of PAHOs objectives of Sustainable Development and develop a social and health situation analysis in Puerto Rico using theoretical-conceptual, operational, methodological, and practical experience in the field of Health Promotion. Based on the social and health situational analysis, students will outline the design of integrated systemic strategies to address the Sustainability Objective selected and the public health issues associated with it. The analysis and strategies will be addressed from an intersectoral /interprofessional approach. (Section of Syllabus: EVALUATION STRATEGIES)
15. Integrate knowledge of cultural values and practices in the design of public health policies and programs.	ADSS 8011 Health Systems and Policy	<u>Health Policy's Analysis Essay:</u> In the Essay, students are expected to identify and explain the positive integration of public health in the health system. In the narrative, the student should demonstrate an understanding of the role, function, and settings of public health by national, regional, and local agencies. The student will also be able to exhibit analyzing and evaluating health systems from different countries, specifically models and approaches to improve the health system outcomes considering cultural values. The paper must also compare and contrast their findings with the health policy statements of the Pan American Health Organization, the World Health Organization, and the European Community. In this manner, students acquire a global perspective of health policy in addition to the experience of Puerto Rico and the United States. (Section of Syllabus: EVALUATION STRATEGIES)
	CISO 8005 Culture, Social Inequity and Community Health	<u>Social Equity and Health Case Study:</u> Students must choose a course topic, conduct bibliographic research, prepare, and present a written case study analysis on social equity and health. Based on the analysis of the case study, student will propose specific recommendations considering organizing stakeholders and specific strategies to promote social equity. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
	ADSS 8105 Applied Public Health Leadership Seminar	<u>Analytic Memo:</u> Critically analyze a public health issue. The professor will identify two recent news (in a local newspaper) about a public health issue. The students will write (in a pair work or small group work) an analytic memo (1 or 2 page) to the President of the Senate of Puerto Rico about this topic. The analytical memo must explain the main implications of this situation in terms of public policies. (Section of Syllabus: EVALUATION STRATEGIES)
16. Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis.	ADSS 8011 Health Systems and Policy	<u>Decision memos:</u> Students will demonstrate their capacity to engage in policy development and analysis through the development of three policy decision memorandums during the course. Students will demonstrate their capacity to analyze, synthesize, integrate, and communicate relevant health policy issues to executive levels of government and key stakeholders. Each decision memo will be developed from a topic assigned by the course instructor and will incorporate in its analysis the latest relevant public health research, an analysis of legal and regulatory frameworks, ethical considerations, and the role of various stakeholders. Elements related to access, quality, and cost of interest to various stakeholders will be taken into account in the analysis and policy recommendations (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 8027 Environmental Public Health of Urban Communities	<u>Action plan development:</u> The action plan is the final step of the process that began with the urban community selected. In this phase, the student's group proposes specific actions to address the different environmental public health issues considering organizing stakeholders identified during the community assessment. The action plan must reflect the integration of public health research, an analysis of legal and regulatory frameworks, ethical considerations, and the role of various stakeholders in the development of policy actions contained in the Action Plan. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
17. Propose interprofessional team approaches to improving public health.	SALP 8005 Health Promotion Seminar	<u>Sustainable Development Objectives/Situational Analysis:</u> Students will select one of PAHOs objectives of Sustainable Development and develop a social and health situation analysis in Puerto Rico using theoretical-conceptual, operational, methodological, and practical experience in the field of Health Promotion. Based on the social and health situational analysis, students will outline the design of integrated systemic strategies to address the Sustainability Objective selected and the public health issues associated with it. The analysis and strategies will be addressed from an intersectoral /interprofessional approach. (Section of Syllabus: EVALUATION STRATEGIES)
	ADSS 8105 Applied Public Health Leadership Seminar	<u>Case study interprofessional team:</u> approaches The student will analyze, and critique the aspects, dimensions and processes that are present in the interprofessional team approaches to improve public health in a case. After analyzing the situation, the students must propose alternatives interprofessional team approaches to address this situation. (Section of Syllabus: EVALUATION STRATEGIES)
Education & Workforce Development		
18. Assess an audience's knowledge and learning needs.	SALP 8026 Public Health Leader as Educator	<u>Educational unit/intervention plan:</u> Student will have the opportunity for teaching experience. As part of the strategy, student will design and implement an educational intervention in academic or non-academic setting. Students will form peer groups (no more than three) or choose to work independently to plan, design, implement and complete a written group project and a 20-30 minute in-class presentation. Early in the trimester, we will begin to explore settings and topic for the project. Students will submit a one-page outline detailing the purpose and the design of the project for approval. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D3.2 Assessment of Competencies for DrPH (all concentrations)		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
19. Deliver training or educational experiences that promote learning in academic, organizational or community settings.	SALP 8026 Public Health Leader as Educator	<u>Educational unit/intervention plan:</u> Student will have the opportunity for teaching experience. As part of the strategy, student will design and implement an educational intervention in academic or non-academic setting based on an assessment of the audiences needs and profile. Students will form peer groups (no more than three) or choose to work independently to plan, design, implement and complete a written group project and a 20-30 minute in-class presentation. Early in the trimester, we will begin to explore settings and topic for the project. Students will submit a one-page outline detailing the purpose and the design of the project for approval. (Section of Syllabus: EVALUATION STRATEGIES)
20. Use best practice modalities in pedagogical practices.	SALP 8026 Public Health Leader as Educator	<u>Educational unit/intervention plan:</u> Student will have the opportunity for teaching experience. As part of the strategy, student will design and implement an educational intervention in academic or non-academic setting based on an assessment of the audiences needs and profile. Students will form peer groups (no more than three) or choose to work independently to plan, design, implement and complete a written group project and a 20-30 minute in-class presentation. Early in the trimester, we will begin to explore settings and topic for the project. Students will submit a one-page outline detailing the purpose and the design of the project for approval. (Section of Syllabus: EVALUATION STRATEGIES)

- 3) **Include the most recent syllabus from each course listed in Template D3-1, or written guidelines for any required elements listed in Template D3-1 that do not have a syllabus. (electronic resource file)**

Core courses syllabi included in the **Electronic Resource File D3.3**

- 4) **If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

Strengths

- All foundational competencies are addressed in at least one course of the required Public Health Core courses in the newly revised curriculum offered since AY 2019-20 for the HSAM and SDH concentrations and since 2020-21 for EH. It provides a common foundational core curriculum for all DrPH concentrations.
- The ability of students to perform each competency is assessed at least once throughout the curriculum. The assessment strategies are diverse allowing a wide range of opportunities to assess knowledge attainment and understanding; as well as skills in analysis, synthesis, critical thinking, problem solving, and effective communication.
- The implementation of this new curriculum provides the opportunity to enhance knowledge and skills that were scarce in the previous curriculum such as those related to best practice modalities in pedagogical practices.

Weaknesses

- The competency-based curriculum and its assessment are relatively new, thus it will require more time for an effective implementation. Since new DrPH curriculum was implemented in 2019 (SDH, HSAM) and 2020 (EH), some revised and new courses have not been offered.
- The addition of additional core courses to the curriculum may have an effect in a timely completion of requirements.

Lessons Learned

- Since the school is implementing a new competency-based curriculum, it needs time and continuous evaluation to allow for further development and refinement of assessment strategies. The school is in the process of implementing the curriculum with the proposed assessment plan and, simultaneously, doing formative and summative evaluation of both processes.

D4. MPH & DRPH CONCENTRATION COMPETENCIES

MPH and DrPH graduates attain competencies in addition to the foundational competencies listed in Criteria D2 and D3. These competencies relate to the school or program's mission and/or to the area(s) of concentration. The school or program defines at least five distinct competencies for each concentration or generalist degree at each degree level in addition to those listed in Criterion D2 or D3. The list of competencies may expand on or enhance foundational competencies, but the school or program must define a specific set of statements that articulates the depth or enhancement for all concentrations and for generalist degrees. It is not sufficient to refer to the competencies in Criterion D2 or D3 as a response to this criterion. The school or program documents at least one specific, required assessment activity (eg, component of existing course, paper, presentation, test) for each defined competency, during which faculty or other qualified individuals (eg, preceptors) validate the student's ability to perform the competency. These assessment activities may be spread throughout a student's plan of study. Because this criterion defines competencies beyond the foundational competencies required of all MPH and DrPH students, assessment opportunities typically occur in courses that are required for a concentration or in courses that build on those intended to address foundational competencies. Assessment may occur in simulations, group projects, presentations, written products, etc.

- 1) Provide a matrix, in the format of Template D4-1, that lists at least five competencies in addition to those defined in Criterion D2 or D3 for each MPH or DrPH concentration or generalist degree, including combined degree options, and indicates at least one assessment activity for each of the listed competencies. Typically, the school or program will present a separate matrix for each concentration. (self-study document)**

TABLE D4.1.a. Assessment of Competencies for MPH Generalist

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
1. Propose policy alternatives for improving the health of populations.	ADSS 6555 Legislative Process for Public Health	<p><u>Legislative Project:</u> Students' learning and achievement will be assessed through a variety of evaluation techniques. Students must select a topic or identify a public health need to develop a legislative report demonstrating the use of evidence-based analysis to identify the problem. Likewise, it must present the evidence of evaluation of health policies integrating advocacy strategies and propose to design public health initiatives that allow the resolution of the public health situation to improve the health status of the populations.</p> <p>Students will be organized in sub-groups to develop their projects reports, their individual performance will be readily separated from those of other members of the group and evaluated individually.</p>
	ADSS 6584 Health Politics and Policy	<p><u>Group health policy analysis paper:</u> Students will form groups of 5-6 persons and will prepare a health policy analysis paper in which they will apply the concepts discussed in class evaluating the impact of a health policy on population health issues. The task will consist in selecting a country and comparing one of its health policies with a health policy of Puerto Rico. These policies may exist in the form of constitutional provisions, laws, resolutions, executive orders, or local ordinances. The paper must include an introduction that: compares the selected country's socio-demographic and epidemiological profile to the Puerto Rico reality; describes the problem/issue that the policy addresses; provides a brief review of evidence of policy effectiveness in addressing the problem/issue, and explains the purpose of the paper. The body of the paper must include a discussion evaluating the impact of a health policy on population health in both countries considering the following: the institutions and agencies responsible for formulating and implementing the selected health policy, including executive, legislative, judiciary and municipal/local authorities; health system and services, regulatory systems and financing authorities; and the results/impact of the policy on population health in the selected country and in Puerto Rico. The paper should discuss the multiple dimensions of the policy-making process, including the roles of ethics and evidence, with evidence-based information from public health research. The paper must finalize with a conclusion, which discusses the implications for health policy reform in Puerto Rico. The paper should be between 15-20 pages long (single space; Arial 12 font; 1-inch margins).</p> <p><u>Presentation of group health policy analysis:</u> A group presentation of a maximum of 30 minutes based on the health policy analysis paper will be evaluated. Through this</p>

TABLE D4.1.a. Assessment of Competencies for MPH Generalist		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		exercise students will present a brief lecture of an evaluation of a health policy issue comparing a health policy from the selected country and Puerto Rico, including discussing the dimensions of the policy-making process and integrating elements of advocacy strategies for public policy development.
	ADSS 6620 Advance Public Health Policy Analysis	<u>Problem Statement and Policy Analysis Paper and Presentation:</u> Each student group will prepare a policy analysis paper and present the work in class. Each group of students will prepare a 15-20 page paper that: a) describes the problem you want to address; .b) identifies any other programs/systems that exist to address the problem; c) describes your policy goals, i.e., what do you want to accomplish; d) includes a short description of 2-3 alternative policy options that could address the problem; e) includes at least three evaluation criteria the student will use to compare the different policy options; f) present your analysis of the different policy options using the evaluation criteria chosen. See details of what is required in Assignment #4 document.
2. Apply health promotion principles, theories and conceptual frameworks for public health programs and policy development.	SALP 6005 Fundamentals of Health Promotion	<p><u>Observatory Project in Health Promotion based on the Sustainable Development:</u> <u>Goals:</u> The Observatory in Health Promotion consists of an educational activity of the course that combines various activities namely: documentary, bibliographic and monographic research of a topic; the interview with Key Informants on the subject, the Study Visit to programs, projects or initiatives on the subject and community outreach activities on the subject. The topics should be analyzed from the perspective of Health Promotion and its five basic strategies. The project consists of three tasks for a summative evaluation where various progressive activities are combined in which students are expected to integrate and apply the concepts and areas discussed in classes ranging from the development of community outreach activities, development of monographs that allow bibliographic research, to culminate with a design of a document of public statement on health advocacy in the subject selected by students. The tasks are broken down as follows:</p> <p>a) Academic Forum of Health Promotion or community outreach activity on issues of social and health relevance. Through this exercise, students together with the organization or group within the theme they have selected will be able to create coalitions and associations that allow them to discuss structural prejudice and inequalities that are barriers to achieving equity at the organizational, community and social levels.</p>

TABLE D4.1.a. Assessment of Competencies for MPH Generalist		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p>b) Monographic work on the same topic for collective book publication: Through this exercise the student can compare the organization, structure and function of health care, public health and regulatory systems in different environments, considering the theories and principles of health promotion.</p> <p>c) Document of Public Declaration on the subject (advocacy in health): Through this exercise the student will be able to advocate for political, social or economic policies and programs that improve health in diverse populations, applying the theory and principles of health promotion.</p>
3. Integrate elements of advocacy strategies to public health initiatives to improve population health.	ADSS 6620 Advanced Public Health Policy Analysis	<u>Policy Advocacy Strategy Paper and Presentation:</u> Each student group will prepare a Policy Advocacy Strategy Paper and will present the paper in class. This will include the key elements of advocacy strategic analysis using evidence-based information and choice. In addition, it is important to note that each part of the advocacy strategic process should be constantly informing and guiding the other parts, showing the integration for designing public health initiatives to improve health in different populations. The rubric to be used to evaluate the paper is included below. See details of what is required in Assignment #7 document. The rubric to be used to evaluate the paper is included below.
	SALP 6005 Fundamentals of Health Promotion	<p><u>Observatory Project in Health Promotion based on the Sustainable Development Goals:</u> The Observatory in Health Promotion consists of an educational activity of the course that combines various activities namely: documentary, bibliographic and monographic research of a topic; the interview with Key Informants on the subject, the Study Visit to programs, projects or initiatives on the subject and community outreach activities on the subject. The topics should be analyzed from the perspective of Health Promotion and its five basic strategies. The project consists of three tasks for a summative evaluation where various progressive activities are combined in which students are expected to integrate and apply the concepts and areas discussed in classes ranging from the development of community outreach activities, development of monographs that allow bibliographic research, to culminate with a design of a document of public statement on health advocacy in the subject selected by students. The tasks are broken down as follows:</p> <p>a) Academic Forum of Health Promotion or community outreach activity on issues of social and health relevance. Through this exercise, students together with the organization or group within the theme they have selected will be able to create coalitions and associations that allow them to discuss structural prejudice and</p>

TABLE D4.1.a. Assessment of Competencies for MPH Generalist

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p>inequalities that are barriers to achieving equity at the organizational, community and social levels.</p> <p>b) Monographic work on the same topic for collective book publication: Through this exercise the student can compare the organization, structure and function of health care, public health and regulatory systems in different environments, considering the theories and principles of health promotion.</p> <p>c) Document of Public Declaration on the subject (advocacy in health): Through this exercise the student will be able to advocate for political, social or economic policies and programs that improve health in diverse populations, applying the theory and principles of health promotion.</p>
	<p>ADSS 6584 Health Politics and Policy</p>	<p><u>Group health policy analysis paper:</u> Students will form groups of 5-6 persons and will prepare a health policy analysis paper in which they will apply the concepts discussed in class. The task will consist in selecting a country and comparing one of its national health policies with a health policy of Puerto Rico. These policies may exist in the form of laws or constitutional provisions.</p> <p>The paper must include an introduction that: compares the selected country's socio-demographic and epidemiological profile to the Puerto Rico reality; describes the problem/issue that the policy addresses; and, explains the purpose of the paper. The body of the paper must include a discussion evaluating health policies issues of the following in both countries: the institutions and agencies responsible for formulating and implementing the selected health policy, including executive, legislative, judiciary and municipal/local authorities; health system and services, regulatory and financing authorities; and the results/impact of the policy in the selected country and Puerto Rico. Throughout the project students should discuss the multiple dimensions of the policy-making process, integrate elements of advocacy including the roles of ethics and evidence, with evidence based information from public health research. The paper must finalize with a conclusion, which discusses the implications for health policy reform in Puerto Rico. The paper should be between 15-20 pages long (single space; Arial 12 font; 1-inch margins).</p> <p>By December 2, a selected representative of each group must inform the professor via email of the names of group members, the country selected and the health policy topic to be analyzed. If the professor has any questions regarding the country or the topic, a meeting to discuss this will be arranged with the group. By the end of the fourth week of class a representative of each group must inform the professor via email about the</p>

TABLE D4.1.a. Assessment of Competencies for MPH Generalist

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p>division of tasks/responsibilities among group members. By the end of the eighth week of class a representative of each group must inform the professor via email about the group's progress regarding the preparation/development of the health policy analysis paper. The deadline for receiving the final paper in pdf format via email will be February 24, 2021. The rubric to be utilized for the evaluation of the paper is presented below. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Presentation of group health policy analysis:</u> A group presentation of a maximum of 30 minutes based on the health policy analysis paper will be evaluated. Through this exercise students will present a brief lecture the evaluation of a health policy issue comparing a health policy from the selected country and Puerto Rico discussing the dimensions of the policy making process and culminating with a proposal of community initiatives integrating elements of advocacy strategies for public policy development. Students must use an interactive lecture or other presentation program to ensure effective communication. The rubric to be utilized for the evaluation of the presentation is presented below. A draft copy of the presentation must be sent via email to the course professor at least two days before the presentation for review and approval. The date of the presentation will be on February 24, 2021. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	<p>ADSS 6620 Advance Public Health Policy Analysis</p>	<p><u>Policy Advocacy Strategy Paper:</u> Each student group will prepare a Policy Advocacy Strategy Paper and will present the paper in class. This will include the key elements of advocacy strategic analysis using evidence-based information and choice. In addition, it is important to note that each part of the advocacy strategic process should be constantly informing and guiding the other parts, showing the integration for designing public health initiatives to improve health in different populations. (Section of Syllabus: EVALUATION STRATEGIES)</p>
<p>4. Use finance principles in public health management scenarios.</p>	<p>ADSS 6621 Financial Resources management for Public Health Organizations</p>	<p><u>Final Project (include Final Oral Presentation and written document):</u> Students will integrate and apply course concepts using a real case (provided by the instructor) were students will develop an intervention project where they will present budgetary and financial management issues, considering the multiple dimensions for health policy evaluation and the process of formulating them. Students will integrate the different fiscal management topics discussed in class with special emphasis on the use of finance principles in public health management scenarios. These interrelated scenarios will correspond to the three application cases before the course LAO's final integration project. Although the final project will be evaluated as a group each individual student must present in the oral presentation of the project and must provide a summary of</p>

TABLE D4.1.a. Assessment of Competencies for MPH Generalist		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		his / her contribution to the final project with a maximum of two pages. This summary will be used to assess individual contributions and performance in the group.
5. Conduct evidence-based analysis, integrating appropriate data for the development, implementation and evaluation of effective public health programs and policies.	ADSS 6555 Legislative Process for Public Health Professionals	<u>Legislative Project:</u> Students' learning and achievement will be assessed through a variety of evaluation techniques. Students must select a topic or identify a public health need to develop a legislative report demonstrating the use of evidence-based analysis to identify the problem. Likewise, it must present the evidence of evaluation of health policies integrating advocacy strategies and propose to design public health initiatives that allow the resolution of the public health situation to improve the health status of the populations. Students will be organized in sub-groups to develop their projects reports, their individual performance will be readily separated from those of other members of the group and evaluated individually.
	ADSS 6584 Health Politics and Policy	<u>Group health policy analysis paper:</u> Students will form groups of 5-6 persons and will prepare a health policy analysis paper in which they will apply the concepts discussed in class evaluating the impact of a health policy on population health issues. The task will consist in selecting a country and comparing one of its health policies with a health policy of Puerto Rico. These policies may exist in the form of constitutional provisions, laws, resolutions, executive orders, or local ordinances. The paper must include an introduction that: compares the selected country's socio-demographic and epidemiological profile to the Puerto Rico reality; describes the problem/issue that the policy addresses; provides a brief review of evidence of policy effectiveness in addressing the problem/issue, and explains the purpose of the paper. The body of the paper must include a discussion evaluating the impact of a health policy on population health in both countries considering the following: the institutions and agencies responsible for formulating and implementing the selected health policy, including executive, legislative, judiciary and municipal/local authorities; health system and services, regulatory systems and financing authorities; and the results/impact of the policy on population health in the selected country and in Puerto Rico. The paper should discuss the multiple dimensions of the policy-making process, including the roles of ethics and evidence, with evidence-based information from public health research. The paper must finalize with a conclusion, which discusses the implications for health policy reform in Puerto Rico. The paper should be between 15-20 pages long (single space; Arial 12 font; 1-inch margins).

TABLE D4.1.a. Assessment of Competencies for MPH Generalist		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<u>Presentation of group health policy analysis:</u> A group presentation of a maximum of 30 minutes based on the health policy analysis paper will be evaluated. Through this exercise students will present a brief lecture of an evaluation of a health policy issue comparing a health policy from the selected country and Puerto Rico, including discussing the dimensions of the policy-making process and integrating elements of advocacy strategies for public policy development.

TABLE D4.1.b. Assessment of Competencies for MPH Epidemiology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
Explain the concepts, methods, and approaches of epidemiology in addressing public health issues to academic, public health practice and lay audiences and settings.	EPID 6527 Public Health Surveillance	<u>Design of surveillance system oral and written presentation:</u> Students will justify and design a new surveillance system not already established in Puerto Rico that will address the needs of the community. The characteristics of this original surveillance system will be presented orally and in a written document. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6529 Epidemiology of Chronic Diseases	<u>Critical analysis and analytical review and Written report (monograph):</u> Students are randomly distributed into three work groups. The professor assigns each group a topic of current relevance within the epidemiology of chronic diseases. Independently, each student within each group must search and critically analyze an article that evaluates the relationship of interest. An individual report is submitted to the instructor for grading (2% of the final note). The analysis is done individually and then discussed with the other group members. The consensus resulting from the individual critical analyzes, as well as descriptive elements of the epidemiology of the disease, including a discussion of relevant aspects for the formulation of control and prevention plans, must be submitted in writing for the professor's review and grading. This work allows the student to work and develop skills in searching and critically analyzing scientific literature. Students also develop teamwork skills, including participating in decision-making, leadership, communicating findings to an audience, working with recommendations, and answering

TABLE D4.1.b. Assessment of Competencies for MPH Epidemiology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		criticisms of their work in a professional manner. (Section of Syllabus: EVALUATION STRATEGIES)
Critically evaluate the scientific literature about a defined public health problem.	EPID 6524 Community Health Needs Assessment	<u>Final written document (proposal)</u> : The final requirement of the course is the study proposal. This document consists of three written chapters: (1) Introduction (research problem, magnitude of the problem, and justification, not only of the importance of the health problem identified but of how the findings will help to design interventions to address it or for the development of public policy regarding it), (2) Literature review (theoretical framework, etiology of the health problem, risk and protective factors, prevention and control measures), and (3) Methods (objectives, study design, population and sample selection, data collection plan, data processing and analysis plan). (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6528 Epidemiology of Mental Disorders	<u>Oral presentations</u> : Students will give two group oral presentations. In the first presentation, students will present and discuss a key scientific publication in the area of psychiatric epidemiology research. This presentation will allow students to improve their critical thinking skills and to gain a deeper understanding of how to conduct epidemiologic research in this area. In the second presentation, students will present one of the mental disorders issues not discussed in class. Students will broaden their knowledge of the contents of the course by discussing the selected disorder, including the magnitude and significance of the problem, a review of existing descriptive and analytical epidemiological studies, risk factors, comorbidities, prevention and treatment measures, and the economic impact of the disorder. These presentations will also allow students to improve their oral communications skills and foster teamwork. Each student is individually graded. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6529 Epidemiology of Chronic Diseases	<u>Critical analysis and analytical review and Written report (monograph)</u> : Students are randomly distributed into three work groups. The professor assigns each group a topic of current relevance within the epidemiology of chronic diseases. Independently, each student within each group must search and critically analyze an article that evaluates the relationship of interest. An

TABLE D4.1.b. Assessment of Competencies for MPH Epidemiology

Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		individual report is submitted to the instructor for grading (2% of the final note). The analysis is done individually and then discussed with the other group members. The consensus resulting from the individual critical analyzes, as well as descriptive elements of the epidemiology of the disease, including a discussion of relevant aspects for the formulation of control and prevention plans, must be submitted in writing for the professor's review and grading. This work allows the student to work and develop skills in searching and critically analyzing scientific literature. Students also develop teamwork skills, including participating in decision-making, leadership, communicating findings to an audience, working with recommendations, and answering criticisms of their work in a professional manner. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6536 Epidemiology and Pathogenesis of Cancer	<u>Critical analysis and analytical review (written report monograph:</u> The students will revise and critically analyze scientific literature to be aware of controversies involving cancer screening. For example, controversies regarding the prostate cancer screening. The students will be organized in groups. The monograph requires the following: cancer definition, risk factors as discussed by the National Cancer Institute, descriptive epidemiology (rates, trends), summary of the most relevant findings of the individual critical analyses, comparison of the screening guidelines of the U.S. Preventive Services Task Force with the screening guidelines of other health professional organizations, conclusion, and bibliography. (Section of Syllabus: EVALUATION STRATEGIES for more details.)
Select the appropriate epidemiologic study design and data collection methods to evaluate a research question of public health importance.	BIOE 6526 Applied Statistic Methods in Epidemiology	<u>Project:</u> The purpose of the project is to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. Through solving a public health issue, the student will have the opportunity to apply the concepts studied throughout the course. As a learning evaluation strategy, the instructor will guide the process of development and presentation of the project so that it constitutes a structured and well-implemented application by the student of the concepts and techniques studied in this course. It is an integrative learning and

TABLE D4.1.b. Assessment of Competencies for MPH Epidemiology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		application strategy of course topics. The criteria to consider for the project's development include: 1. Formulation of the research question; 2. Statement of the problem / Justification; 3. Formulation of study objectives; 4. Formulation of study hypotheses; 5. Data analysis; 6. Presentation of results; 7. Formulation of conclusions; 8. Formulation of recommendations; 9. Oral presentation of the project (individual grade); 10. Evaluation of the working group (individual grade). (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6524 Community Health Needs Assessment	<u>Final written document:</u> The final requirement of the course is the study proposal. This document consists of three written chapters: (1) Introduction (research problem, magnitude of the problem, and justification, not only of the importance of the health problem identified but of how the findings will help to design interventions to address it or for the development of public policy regarding it), (2) Literature review (theoretical framework, etiology of the health problem, risk and protective factors, prevention and control measures), and (3) Methods (objectives, study design, population and sample selection, data collection plan, data processing and analysis plan). (Section of Syllabus: EVALUATION STRATEGIES)
Discuss the significance, descriptive and analytical epidemiology, and prevention and control measures in relation to the study of infectious and non-infectious diseases, as well as other health-related outcomes.	EPID 6527 Public Health Surveillance	<u>Design of surveillance system oral and written presentation:</u> Students will justify and design a new surveillance system not already established in Puerto Rico that will address the needs of the community. The characteristics of this original surveillance system will be presented orally and in a written document. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6528 Epidemiology of Mental Disorders	<u>Oral presentations:</u> Students will give two group oral presentations. In the first presentation, students will present and discuss a key scientific publication in the area of psychiatric epidemiology research. This presentation will allow students to improve their critical thinking skills and to gain a deeper understanding of how to conduct epidemiologic research in this area. In the second presentation, students will present one of the mental disorders issues not discussed in class. Students will broaden their knowledge of the contents of the course by discussing the selected disorder, including the magnitude and significance of the problem, a review of existing descriptive and analytical

TABLE D4.1.b. Assessment of Competencies for MPH Epidemiology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		epidemiological studies, risk factors, comorbidities, prevention and treatment measures, and the economic impact of the disorder. These presentations will also allow students to improve their oral communications skills and foster teamwork. Each student is individually graded. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6529 Epidemiology of Chronic Diseases	<u>Critical analysis and analytical review and Written report (monograph):</u> Students are randomly distributed into three work groups. The professor assigns each group a topic of current relevance within the epidemiology of chronic diseases. Independently, each student within each group must search and critically analyze an article that evaluates the relationship of interest. An individual report is submitted to the instructor for grading (2% of the final note). The analysis is done individually and then discussed with the other group members. The consensus resulting from the individual critical analyzes, as well as descriptive elements of the epidemiology of the disease, including a discussion of relevant aspects for the formulation of control and prevention plans, must be submitted in writing for the professor's review and grading. This work allows the student to work and develop skills in searching and critically analyzing scientific literature. Students also develop teamwork skills, including participating in decision-making, leadership, communicating findings to an audience, working with recommendations, and answering criticisms of their work in a professional manner. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6535 Epidemiology of Infectious Diseases	<u>Oral presentation:</u> Students will develop an oral presentation based on an infectious disease not discussed in class. Students will be able to discuss the appropriateness of the available epidemiologic study designs and data collection methods when evaluating the transmission dynamics of the selected infectious disease. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6536 Epidemiology and Pathogenesis of Cancer	<u>Critical analysis and analytical review (written report monograph):</u> The students will revise and critically analyze scientific literature to be aware of controversies involving cancer screening. For example, controversies regarding the prostate cancer screening. The students will be organized in

TABLE D4.1.b. Assessment of Competencies for MPH Epidemiology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		groups. The monograph requires the following: cancer definition, risk factors as discussed by the National Cancer Institute, descriptive epidemiology (rates, trends), summary of the most relevant findings of the individual critical analyses, comparison of the screening guidelines of the U.S. Preventive Services Task Force with the screening guidelines of other health professional organizations, conclusion, and bibliography. (Section of Syllabus: EVALUATION STRATEGIES for more details.)
Apply descriptive and analytical statistical methods for the purpose of analyzing the health of populations.	BIOE 6526 Applied Statistic Methods in Epidemiology	<u>Project:</u> The purpose of the project is to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. Through solving a public health issue, the student will have the opportunity to apply the concepts studied throughout the course. As a learning evaluation strategy, the instructor will guide the process of development and presentation of the project so that it constitutes a structured and well-implemented application by the student of the concepts and techniques studied in this course. It is an integrative learning and application strategy of course topics. The criteria to consider for the project's development include: 1. Formulation of the research question; 2. Statement of the problem / Justification; 3. Formulation of study objectives; 4. Formulation of study hypotheses; 5. Data analysis; 6. Presentation of results; 7. Formulation of conclusions; 8. Formulation of recommendations; 9. Oral presentation of the project (individual grade); 10. Evaluation of the working group (individual grade). (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6536 Epidemiology and Pathogenesis of Cancer	<u>Critical analysis and analytical review (written report monograph:</u> The students will revise and critically analyze scientific literature to be aware of controversies involving cancer screening. For example, controversies regarding the prostate cancer screening. The students will be organized in groups. The monograph requires the following: cancer definition, risk factors as discussed by the National Cancer Institute, descriptive epidemiology (rates, trends), summary of the most relevant findings of the individual critical analyses, comparison of the screening guidelines of the U.S. Preventive Services Task Force with the screening guidelines of other health professional

TABLE D4.1.b. Assessment of Competencies for MPH Epidemiology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		organizations, conclusion, and bibliography.__(Section of Syllabus: EVALUATION STRATEGIES for more details.)

TABLE D4.1.c. Assessment of Competencies for MPH Biostatistics		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
Apply the most appropriate measures to describe a public health problem using public health statistics.	BIOE 6535 Statistical Inference	<u>Individual Exams:</u> The exams will cover fundamental topics for hypothesis testing (including Type I and Type II errors, p-values, and power), interval estimation and analysis techniques for epidemiological studies, such as association measures and stratified analysis. The exams will be to interpret and solve Public Health issues using biostatistical knowledge and considering the contexts where the studies were designed and implemented. (Section of Syllabus: EVALUATION STRATEGIES)
	BIOE 6605 Statistical Computing Applied to Public Health	<u>Individual Exams:</u> The exams will cover the topics such as: standardized rates by direct and indirect methods, ANOVAs, Mantel-Haenszel method for estimate the magnitude of association between an exposure factor and disease for different epidemiological designs, for which they are scheduled. The exams will be to interpret and problem solving of public health issues using biostatistics knowledge. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6524 Community Health Needs Assessment	<u>Final written document (proposal):</u> The final requirement of the course is the study proposal. This document consists of three written chapters: (1) Introduction (research problem, magnitude of the problem, and justification, not only of the importance of the health problem identified but of how the findings will help to design interventions to address it or for the development of public policy regarding it), (2) Literature review (theoretical framework, etiology of the health problem, risk and protective factors, prevention and control measures), and (3) Methods (objectives, study design, population and sample selection, data collection plan, data processing and analysis plan). (Section of Syllabus: EVALUATION STRATEGIES)
	BIOE 6537 Applied Nonparametric Statistics	<u>Project:</u> This evaluation consist in a project presentation student will perform the analysis with the topics studied in class. In this component, students will need to identify a public health problem of interest and perform the corresponding analysis using nonparametric statistics covered in class. Students will write a short report about their findings and give a short

TABLE D4.1.c. Assessment of Competencies for MPH Biostatistics		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		presentation about it. This will encourage student to critical thinking and practice writing across the curriculum as well practicing communication in both scientific and general public. (Section of Syllabus: EVALUATION STRATEGIES)
Design the most suitable sample design for analyzing public health problems using different epidemiological design.	BIOE 6545 Introduction to Sampling Theory	<p><u>Case Study:</u> Students will be divided into a few groups, each tasked with the development of a sampling design and analysis proposal from a real population involved in issues of Public Health area. Content: Develop the case study with the following content: Introduction: Identify a Public Health issue in a specific population as a study theme. Describe the Public Health issue and its risk factors. Objectives of the Study: Evaluate and write an implementation proposal to design and analyze different forms of sample surveys applied to a Public Health issue in a specific population.</p> <p><u>Study Population:</u> Indicate your sampled population (for example, population over 65, pregnant women, unemployed, retired with a pension, ...). This must be related to the target population where the Public Health issue occurs, or where we are interested in evaluating this issue of interest.</p> <p><u>Design of Epidemiological Study:</u> Define the analytical epidemiological design (for example, non-paired case control, clinical trials, ...). Define the methods of measurement and data collection (use of a questionnaire, laboratory test, medical file, ...).</p> <p><u>The Frame:</u> How will the sampling units of the population be identified and divided? The sampling units must cover the whole of the population and they must not overlap.</p> <p><u>Study Variables:</u> Define which would be the study variables that include: (1) type of subject case: case or control, (2) the new exposure, (3) risk factors (a maximum of two factors). There must be a maximum of 4 variables to be analyzed: outcome, exposure, and maximum two risk factors.</p> <p><u>Selection of the Sample:</u> Select one in a variety of plans by which the sample may be selected. For each plan that is considered, rough estimates of the sample size can be made from a knowledge of the degree of precision desired.</p>

TABLE D4.1.c. Assessment of Competencies for MPH Biostatistics		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p>Take into account the rate of nonresponse and actions when encountering certain impossibilities of obtaining the data. The relative costs and time involved for each plan are also compared before making a decision.</p> <p><u>The Pretest:</u> It is useful to try out the questionnaire on a small scale. This nearly always results in improvements in the questionnaire and may reveal other troubles that will be serious on a large scale. The pretest might be applied to the students of the course who belong to another study group.</p> <p><u>Summary and Statistical Analysis:</u> Define the statistical measures to describe each study variable in the study group. Construct a map illustrating the covered area of the target population and, display, on the same map, how the sample units will be spread over this area.</p> <p><u>Sample Size and Statistical Power:</u> Mention the possible sample size through a chart with different relative costs and time involved options and statistical power.</p> <p><u>Conclusions:</u> Indicate the feasibility and limitations to carry out this study. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	EPID 6524 Community Health Needs Assessment	<p><u>Final written document (proposal):</u> The final requirement of the course is the study proposal. This document consists of three written chapters: (1) Introduction (research problem, magnitude of the problem, and justification, not only of the importance of the health problem identified but of how the findings will help to design interventions to address it or for the development of public policy regarding it), (2) Literature review (theoretical framework, etiology of the health problem, risk and protective factors, prevention and control measures), and (3) Methods (objectives, study design, population and sample selection, data collection plan, data processing and analysis plan). (Section of Syllabus: EVALUATION STRATEGIES)</p>
Employ biostatistical techniques for the evaluation of hypotheses, estimation of parameters, and predictions related to epidemiological studies.	BIOE 6535 Statistical Inference	<p><u>Individual Exams:</u> The exams will cover fundamental topics for hypothesis testing (including Type I and Type II errors, p-values and power), interval estimation and analysis techniques for epidemiological studies, such as association measures and stratified analysis. The exams will be to interpret and solve Public Health issue using biostatistical knowledge and considering</p>

TABLE D4.1.c. Assessment of Competencies for MPH Biostatistics		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		the contexts where the studies were designed and implemented. (Section of Syllabus: EVALUATION STRATEGIES)
	BIOE 6545 Introduction to Sampling Theory	<p><u>Case Study:</u> Students will be divided into a few groups, each tasked with the development of a sampling design and analysis proposal from a real population involved in issues of Public Health area. Content: Develop the case study with the following content: Introduction: Identify a Public Health issue in a specific population as a study theme. Describe the Public Health issue and its risk factors. Objectives of the Study: Evaluate and write an implementation proposal to design and analyze different forms of sample surveys applied to a Public Health issue in a specific population.</p> <p><u>Study Population:</u> Indicate your sampled population (for example, population over 65, pregnant women, unemployed, retired with a pension, ...). This must be related to the target population where the Public Health issue occurs, or where we are interested in evaluating this issue of interest.</p> <p><u>Design of Epidemiological Study:</u> Define the analytical epidemiological design (for example, non-paired case control, clinical trials, ...). Define the methods of measurement and data collection (use of a questionnaire, laboratory test, medical file, ...).</p> <p><u>The Frame:</u> How will the sampling units of the population be identified and divided? The sampling units must cover the whole of the population and they must not overlap.</p> <p><u>Study Variables:</u> Define which would be the study variables that include: (1) type of subject case: case or control, (2) the new exposure, (3) risk factors (a maximum of two factors). There must be a maximum of 4 variables to be analyzed: outcome, exposure, and maximum two risk factors.</p> <p><u>Selection of the Sample:</u> Select one in a variety of plans by which the sample may be selected. For each plan that is considered, rough estimates of the sample size can be made from a knowledge of the degree of precision desired. Take into account the rate of nonresponse and actions when encountering</p>

TABLE D4.1.c. Assessment of Competencies for MPH Biostatistics		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p>certain impossibilities of obtaining the data. The relative costs and time involved for each plan are also compared before making a decision.</p> <p><u>The Pretest:</u> It is useful to try out the questionnaire on a small scale. This nearly always results in improvements in the questionnaire and may reveal other troubles that will be serious on a large scale. The pretest might be applied to the students of the course who belong to another study group.</p> <p><u>Summary and Statistical Analysis:</u> Define the statistical measures to describe each study variable in the study group. Construct a map illustrating the covered area of the target population and, display, on the same map, how the sample units will be spread over this area.</p> <p><u>Sample Size and Statistical Power:</u> Mention the possible sample size through a chart with different relative costs and time involved options and statistical power.</p> <p><u>Conclusions:</u> Indicate the feasibility and limitations to carry out this study. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	BIOE 6555 Regression and Correlation Analysis	<p><u>Data analysis-individual exam:</u> -Two set of exercises with real data will be provided to the students to create a model for explaining the pattern of a random variable using a function with different predicting variables. In addition, during the course several assignments are required with specific topic to develop the skill to create and assess accomplishment of the assumptions related to this type of models. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	BIOE 6605 Statistical Computing Applied to Public Health	<p><u>Project:</u> This evaluation consist in a project presentation student will perform the analysis with the topics studied in class. In this component, students will need to identify a public health problem of interest and perform the corresponding analysis using the topics cover in class. Students will write a short report about their findings and give a short presentation about it. This will encourage student to critical thinking and practice writing across the curriculum as well practicing communication in both scientific and general public. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	BIOE 6537	<p><u>Project:</u> This evaluation consist in a project presentation student will perform the analysis with the topics studied in class. In this component, students will</p>

TABLE D4.1.c. Assessment of Competencies for MPH Biostatistics		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ^a
	Applied Nonparametric Statistics	need to identify a public health problem of interest and perform the corresponding analysis using nonparametric statistics covered in class. Students will write a short report about their findings and give a short presentation about it. This will encourage student to critical thinking and practice writing across the curriculum as well practicing communication in both scientific and general public. (Section of Syllabus: EVALUATION STRATEGIES)
Interpret and summarize the statistical results of scientific publications related to Public Health problems.	BIOE 6605 Statistical Computing Applied to Public Health	<u>Project:</u> This evaluation consist in a project presentation student will perform the analysis with the topics studied in class. In this component, students will need to identify a public health problem of interest and perform the corresponding analysis using the topics cover in class. Students will write a short report about their findings and give a short presentation about it. This will encourage student to critical thinking and practice writing across the curriculum as well practicing communication in both scientific and general public. (Section of Syllabus: EVALUATION STRATEGIES)
	BIOE 6537 Applied Nonparametric Statistics	<u>Project:</u> This evaluation consist in a project presentation student will perform the analysis with the topics studied in class. In this component, students will need to identify a public health problem of interest and perform the corresponding analysis using the topics cover in class. Students will write a short report about their findings and give a short presentation about it. This will encourage student to critical thinking and practice writing across the curriculum as well practicing communication in both scientific and general public. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6524 Community Health Needs Assessment	<u>Final written document (proposal):</u> The final requirement of the course is the study proposal. This document consists of three written chapters: (1) Introduction (research problem, magnitude of the problem, and justification, not only of the importance of the health problem identified but of how the findings will help to design interventions to address it or for the development of public policy regarding it), (2) Literature review (theoretical framework, etiology of the health problem, risk and protective factors, prevention and control measures), and (3) Methods (objectives, study design, population and sample selection, data collection plan, data processing and analysis plan). (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.d. Assessment of Competencies for MPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
Apply appropriate methods to analyze contemporary environmental health problems affecting individuals, communities, and populations, considering the interactions with social factors that influence public health and well-being.	SAAM 6535 Environmental Toxicology	<p><u>Peer Review Case Study Oral presentation</u>: Students will develop a critical assessment of recently published research papers on a topic of interest related to environmental hazard as a public health issue, involving also Q&A sessions and a rubric's evaluation. The study, along with the critique, will be orally presented in class. During presentations, the class will adopt a posture of peer reviewers asking questions (critiques) to the presenter. The first presentation will represent 5%, while the second presentation will represent 10% for a total of 15% of the total grade. The first presentation will be used to make recommendations to improve presentation skills on an environmental toxicology subject, while the second presentation will be evaluated based on the incorporation of recommendations from the first presentation. An electronic copy of the presentation should be provided to the professor as scheduled in the class calendar. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Third Exam (Case study)</u>: Take home exercise for on a risk assessment situation (e.g., arsenic in rice). This is a case study on As in rice where you will make some calculations for the risk assessment. It includes separately some tables to fill them with the values or results requested. On a separate sheet, you have to include all the calculations. The risk assessment consists mainly of four (4) steps: Hazard Identification, Exposure Assessment, Toxicity Assessment (Dose-Response) and Risk Characterization. For this exercise you should: Assess exposure for systemic effects and cancer. Evaluate toxicity (dose-response) for systemic effects and cancer Characterize the risk for systemic effects and cancer Include a conclusion, provide and include reference(s). (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Homework exercises</u> Two homework exercises will be assigned in two specific areas. In the first homework, students will learn how to calculate and interpret dose-response data. The second homework will consist of doing calculations for a toxicokinetics study after exposure to a chemical. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	SAAM 6534 Air Pollution and Public Health	<p><u>Brief literature review</u>: Students will examine the literature that supports a topic of interest related to the course content. This evaluation strategy will be divided into three phases so it can be developed in stages. In summary, students will investigate the selected topic by critically analyzing a minimum of three recently published papers in the scientific literature and synthesizing the findings on the topic and their implications for public health practice. This strategy represents 25% of the course's final grade. Detailed instructions for this</p>

TABLE D4.1.d. Assessment of Competencies for MPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		<p>strategy and its evaluation criteria will be provided in a separate document. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Open-response exam:</u> The exam will be administered during a class period and will consist of open-response questions where students will demonstrate, discuss, or apply acquired knowledge of the course content as described in the outline. Students will also interpret case studies or air pollution data, as presented in tables, graphs, or figures. Mathematical calculations will be needed to answer some of the questions. Each question will have its value indicated in the exam. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Second oral presentation: Synthesis and conclusions of the brief literature review:</u> After completing their brief literature review, students will synthesize the acquired knowledge in a formal presentation where they will inform about: (i) the importance or need for studying this topic, (ii) the human health effects or implications, (iii) the methods used to analyze the selected problem, (iv) a synthesis of the main results, (v) their conclusions, and (vi) the implications of the results for environmental public health. During the presentation, the class will adopt a posture of peer reviewers asking questions (critiques) to the presenter. Detailed instructions and evaluation criteria for this strategy will be provided in a separate document. This presentation will represent 10% of the final grade of the course. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	SAAM 6531 Aquatic Systems and Public Health	<p><u>Final Evaluation:</u> Students will be divided in Working Groups (WG) the first week of the academic quarter. Each WG must select within the first two week of the academic quarter a specific topic related with aquatic systems, water resources and public health. Each WG must present a Final Oral Presentation and deliver a Final Written Essay.</p> <ul style="list-style-type: none"> Final Oral Presentation - Students must present to the professor and classmates the final oral presentation the penultimate week of the quarter. The presentation will be assess using an evaluation rubric. The selected topic shall be explained and shall be exposed for a total of 20 minutes. All group members must participate as equal. Components - Justification, Problem, Objectives and Bibliographic References. It will not exceed more than 2 pages. Font Size 12, space and a half Final Written Essay: The final written essay will be delivered the last week of the quarter. The written essay will be assess using an evaluation rubric. It shall have no more than fifteen pages (15) and nor less than twelve pages (12). The essay must be original, and bibliographical references must be cited in an appropriate manner to

TABLE D4.1.d. Assessment of Competencies for MPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		<p>avoid incurring in plagiarism. The written essay will be assess using an evaluation rubric. The essay will be delivered the last week of the quarter. It will consist of Introduction, Objectives (developed), Characterization of the study area (if applicable), Project development, Conclusions / Recommendations and Bibliographic References. Between 15-20 pages. The appropriate use of language, the presentation of the work and the status of both the problem and the references used will be taken into consideration. The report must be original, and must cite bibliographic references appropriately, in such a way that plagiarism is not incurred. Does not include cover. Font Size 12, space and a half. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Field Trips</u>: The purpose of the field trips is to provide students a unique experience outside their everyday activities where students can see new sights and have hands-on opportunities related with aquatic systems. Students will have the opportunity to use hydrologic instrumentation and equipment. A total of two (2) Field Trips will be required. Each Field Trip will required to deliver a report. Reports must be deliver a week after the day of each field trip. Field trips dates and time will be coordinated with the students at least one month prior to the site visit. (Section of Syllabus: EVALUATION STRATEGIES)</p>
Communicate effectively environmental public health information, including risks, mitigation strategies, and associated uncertainties, to the public and other audiences.	SAAM 6545 Food Safety	<p><u>Food Safety Information Article</u> - Students will write about a food safety issue for the general public. The article should be structured for a publication in print media such as Food Safety News. Students are free to select a topic and research using scientific and legitimate sources. They are to synthesize the information and present it in a clear, concise and organized manner to a general public of non-experts. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	SAAM 6541 Environmental Legislation	<p><u>Case study</u>: Students will identify a specific environmental health problem and will conduct a thorough legal analysis of the situation (eg, regulatory procedures for the control of air pollutants from a tinsmith and painting workshop in a residential area). Students will submit two preliminary reports and a final report. The first report will include the chosen environmental health problem, laws and regulations involved, references, etc. The second report will include a summary of the findings. A final report will be submitted in written and in oral form.</p> <p>The reports will address the legal aspects of a controversy specific, actual, and current environmental. A simple and very specific topic should be selected (example: Regulatory procedures to stop air pollution from body shops and paint shops in residential areas). Each student will deliver two preliminary reports and a final written report and will prepare an</p>

TABLE D4.1.d. Assessment of Competencies for MPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		oral presentation on a real environmental health problem of their interest, or a case study in which they will analyze the applicable environmental law. The first partial report will establish the subject, the regulations and laws involved, duly cited, and the contacts made in the government on the subject discussed. An encyclopedic search should be done in all relevant agencies or institutions. The second report will add a summary of the findings. The final report will be presented orally and in writing. It will be made understandable to the unskilled person, and will include correct and complete citations from sources of information. All reports will have a maximum of one side one paper long. Sufficient copies of the final report will be provided for all students in the course on the day of the oral reports.. (Section of Syllabus: EVALUATION STRATEGIES)
Discuss the processes that determine the sources, fate, and transport of pollutants on the environment, and their potential exposure pathways.	SAAM 6535 Environmental Toxicology	<p><u>Peer Review Case Study Oral presentation:</u> Students will develop a critical assessment of recently published research papers on a topic of interest related to environmental hazard as a public health issue, involving also Q&A sessions and a rubric's evaluation. The study, along with the critique, will be orally presented in class. During presentations, the class will adopt a posture of peer reviewers asking questions (critiques) to the presenter. The first presentation will represent 5%, while the second presentation will represent 10% for a total of 15% of the total grade. The first presentation will be used to make recommendations to improve presentation skills on an environmental toxicology subject, while the second presentation will be evaluated based on the incorporation of recommendations from the first presentation. An electronic copy of the presentation should be provided to the professor as scheduled in the class calendar. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Homework exercises</u> Two homework exercises will be assigned in two specific areas. In the first homework, students will learn how to calculate and interpret dose-response data. The second homework will consist of doing calculations for a toxicokinetics study after exposure to a chemical. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	SAAM 6534 Air Pollution and Public Health	<p><u>Open-response exam</u> The exam will be administered during a class period and will consist of open-response questions where students will demonstrate, discuss, or apply acquired knowledge of the course content as described in the outline. Students will also interpret case studies or air pollution data, as presented in tables, graphs, or figures. Mathematical calculations will be needed to answer some of the questions. Each question will have its value indicated in the exam. (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D4.1.d. Assessment of Competencies for MPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		Exercise with a simple air dispersion model (screen-view): This exercise will consist of a hands-on experience with a simple air dispersion model. After running the model in different scenarios, students will have to contrast and interpret the results generated by integrating their knowledge and discussing the processes affecting the transport and dispersion of air pollutants in each scenario. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 6531 Aquatic Systems and Public Health	<p><u>Final Evaluation:</u> Students will be divided in Working Groups (WG) the first week of the academic quarter. Each WG must select within the first two week of the academic quarter a specific topic related with aquatic systems, water resources and public health. Each WG must present a Final Oral Presentation and deliver a Final Written Essay.</p> <ul style="list-style-type: none"> Final Oral Presentation: Students must present to the professor and classmates the final oral presentation the penultimate week of the quarter. The presentation will be assess using an evaluation rubric. The selected topic shall be explained and shall be exposed for a total of 20 minutes. All group members must participate as equal. <p>Components: Justification, Problem, Objectives and Bibliographic References. It will not exceed more than 2 pages. Font Size 12, space and a half.</p> <ul style="list-style-type: none"> Final Written Essay: The final written essay will be delivered the last week of the quarter. The written essay will be assess using an evaluation rubric. It shall have no more than fifteen pages (15) and nor less than twelve pages (12). The essay must be original, and bibliographical references must be cited in an appropriate manner to avoid incurring in plagiarism. The written essay will be assess using an evaluation rubric. The essay will be delivered the last week of the quarter. It will consist of Introduction, Objectives (developed), Characterization of the study area (if applicable), Project development, Conclusions / Recommendations and Bibliographic References. Between 15-20 pages. The appropriate use of language, the presentation of the work and the status of both the problem and the references used will be taken into consideration. The report must be original, and must cite bibliographic references appropriately, in such a way that plagiarism is not incurred. Does not include cover. Font Size 12, space and a half. (Section of Syllabus: EVALUATION STRATEGIES)
Characterize the human health effects resulting from exposures to environmental risk factors (physical, chemical, and biological)	SAAM 6535 Environmental Toxicology	<u>Exam 3 (Case study):</u> Take home exercise for on a risk assessment situation (e.g., arsenic in rice). This is a case study on As in rice where you will make some calculations for the risk assessment. It includes separately some tables to fill them with the values or results requested. On a separate sheet, you have to include all the calculations. The risk

TABLE D4.1.d. Assessment of Competencies for MPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
and from the deterioration of natural ecosystems.		assessment consists mainly of four (4) steps: Hazard Identification, Exposure Assessment, Toxicity Assessment (Dose-Response) and Risk Characterization. For this exercise you should: Assess exposure for systemic effects and cancer. Evaluate toxicity (dose-response) for systemic effects and cancer Characterize the risk for systemic effects and cancer Include a conclusion, provide and include reference(s). (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 6534 Air Pollution and Public Health	<p><u>Open-response exam:</u> The exam will be administered during a class period and will consist of open-response questions where students will demonstrate, discuss, or apply acquired knowledge of the course content as described in the outline. Students will also interpret case studies or air pollution data, as presented in tables, graphs, or figures. Mathematical calculations will be needed to answer some of the questions. Each question will have its value indicated in the exam. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Second oral presentation: Synthesis and conclusions of the brief literature review:</u> After completing their brief literature review, students will synthesize the acquired knowledge in a formal presentation where they will inform about: (i) the importance or need for studying this topic, (ii) the human health effects or implications, (iii) the methods used to analyze the selected problem, (iv) a synthesis of the main results, (v) their conclusions, and (vi) the implications of the results for environmental public health. During the presentation, the class will adopt a posture of peer reviewers asking questions (critiques) to the presenter. Detailed instructions and evaluation criteria for this strategy will be provided in a separate document. This presentation will represent 10% of the final grade of the course. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	SAAM 6531 Aquatic Systems and Public Health	<p><u>Final Evaluation:</u> Students will be divided in Working Groups (WG) the first week of the academic quarter. Each WG must select within the first two week of the academic quarter a specific topic related with aquatic systems, water resources and public health. Each WG must present a Final Oral Presentation and deliver a Final Written Essay.</p> <ul style="list-style-type: none"> Final Oral Presentation: Students must present to the professor and classmates the final oral presentation the penultimate week of the quarter. The presentation will be assess using an evaluation rubric. The selected topic shall be explained and shall be exposed for a total of 20 minutes. All group members must participate as equal. <p>Components: Justification, Problem, Objectives and Bibliographic References. It will not exceed more than 2 pages. Font Size 12, space and a half</p>

TABLE D4.1.d. Assessment of Competencies for MPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		<ul style="list-style-type: none"> Final Written Essay: The final written essay will be delivered the last week of the quarter. The written essay will be assess using an evaluation rubric. It shall have no more than fifteen pages (15) and nor less than twelve pages (12). The essay must be original, and bibliographical references must be cited in an appropriate manner to avoid incurring in plagiarism. The written essay will be assess using an evaluation rubric. The essay will be delivered the last week of the quarter. It will consist of Introduction, Objectives (developed), Characterization of the study area (if applicable), Project development, Conclusions / Recommendations and Bibliographic References. Between 15-20 pages. The appropriate use of language, the presentation of the work and the status of both the problem and the references used will be taken into consideration. The report must be original, and must cite bibliographic references appropriately, in such a way that plagiarism is not incurred. Does not include cover. Font Size 12, space and a half. (Section of Syllabus: EVALUATION STRATEGIES) <p><u>Exams</u> will cover the sections of material, including the interaction of water quality of aquatic systems and human health and well-being. The exams will be comprised of open questions, multiple-choice questions, and statistical methods for water resources. (Section of Syllabus: EVALUATION STRATEGIES)</p>
Describe federal and state policies and regulatory programs, guidelines, and authorities that control environmental health issues.	SAAM 6531 Aquatic Systems and Public Health	<p><u>Final Evaluation:</u> Students will be divided in Working Groups (WG) the first week of the academic quarter. Each WG must select within the first two week of the academic quarter a specific topic related with aquatic systems, water resources and public health. Each WG must present a Final Oral Presentation and deliver a Final Written Essay.</p> <ul style="list-style-type: none"> Final Oral Presentation: Students must present to the professor and classmates the final oral presentation the penultimate week of the quarter. The presentation will be assess using an evaluation rubric. The selected topic shall be explained and shall be exposed for a total of 20 minutes. All group members must participate as equal. Components: Justification, Problem, Objectives and Bibliographic References. It will not exceed more than 2 pages. Font Size 12, space and a half <p><u>Final Written Essay:</u> The final written essay will be delivered the last week of the quarter. The written essay will be assess using an evaluation rubric. It shall have no more than fifteen pages (15) and nor less than twelve pages (12). The essay must be original, and bibliographical references must be cited in an appropriate manner to avoid incurring in</p>

TABLE D4.1.d. Assessment of Competencies for MPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		<p>plagiarism. The written essay will be assess using an evaluation rubric. The essay will be delivered the last week of the quarter. It will consist of Introduction, Objectives (developed), Characterization of the study area (if applicable), Project development, Conclusions / Recommendations and Bibliographic References. Between 15-20 pages. The appropriate use of language, the presentation of the work and the status of both the problem and the references used will be taken into consideration. The report must be original, and must cite bibliographic references appropriately, in such a way that plagiarism is not incurred. Does not include cover. Font Size 12, space and a half. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	SAAM 6541 Environmental Legislation	<p><u>Case study</u>: Students will identify a specific environmental health problem and will conduct a thorough legal analysis of the situation (eg, regulatory procedures for the control of air pollutants from a tinsmith and painting workshop in a residential area). Students will submit two preliminary reports and a final report. The first report will include the chosen environmental health problem, laws and regulations involved, references, etc. The second report will include a summary of the findings. A final report will be submitted in written and in oral form.</p> <p>The reports will address the legal aspects of a controversy specific, actual, and current environmental. A simple and very specific topic should be selected (example: Regulatory procedures to stop air pollution from body shops and paint shops in residential areas). Each student will deliver two preliminary reports and a final written report and will prepare an oral presentation on a real environmental health problem of their interest, or a case study in which they will analyze the applicable environmental law. The first partial report will establish the subject, the regulations and laws involved, duly cited, and the contacts made in the government on the subject discussed. An encyclopedic search should be done in all relevant agencies or institutions. The second report will add a summary of the findings. The final report will be presented orally and in writing. It will be made understandable to the unskilled person, and will include correct and complete citations from sources of information. All reports will have a maximum of one side one paper long. Sufficient copies of the final report will be provided for all students in the course on the day of the oral reports.. (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D4.1.e. Assessment of Competencies for MPH Gerontology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
Use scientific knowledge, approaches, concepts and models from the field of gerontology and the biological, psychological, and social science disciplines in the analysis of issues relevant to older adults in their personal, family and community contexts.	GERO 6005 Introductory Seminar in Gerontology	<p><u>Oral report:</u> Students will offer information on the course topics, which will be previously assigned and discussed in a group, in a formal and professional way that requires prior preparation. The report includes summary and integration of the literature review about an assigned topic of gerontology. They must present the main approaches, theories, and justification of the author. What is the gerontological thesis presented by the author, give examples, and argue about it? Group conclusions: opinion and proposals. It will be worked on and presented in groups of 3-4 students. The report will be worked on and presented in groups of 3-4 students. Each group will have no more than 20 minutes for the presentation. Each group will distribute a written summary (or handout in Power Point) to the other students.</p> <ul style="list-style-type: none"> • Summary of the assigned topic and related articles, integration of the topics • Approaches and theories exposed, justification of the author or authors. What is the gerontological thesis presented by the author, give examples, and arguments about it • Group conclusions: opinion and proposals • All students must participate in the oral presentations which allows for assessment of individual performance. (Section of Syllabus: EVALUATION STRATEGIES)
	GERO 6503 Psychological Aspects of Aging	<p><u>Life Review Protocol Case Report:</u> From an applied perspective, students will conduct a Life Review protocol with a person aged 75 or older, that they will select and recruit. This protocol seeks to sharpen the students' communication skills and empathy with older adults by gathering information about their participant's life to nourish their learning experience. Students will provide partial case reports of their progress throughout the term (5 partial reports x 6% each = 30% of the final grade). At the end of the course students will work on a final report (20% of the final grade) that incorporates instructor's feedback during the partial case reports. The reports of all the interviews of reminiscence and gero-psychological evaluations will be discussed in class and be handed to the professor on the dates assigned in class. In the final report, students will use their analysis as the basis for proposing strategies that strengthen older adults' capacities and mental health. (30% + 20% = 50%. Partial case reports and final case reports account for 50% of the final grade). (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D4.1.e. Assessment of Competencies for MPH Gerontology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
	GERO 6507 Social Aspects of Aging	<u>Aging Issue Group Report:</u> Students will be divided in small groups and assigned a current issue in gerontology affecting aging populations. Student will analyze the social dimensions of the issue integrating course content with their own research on the subject. The report will consist of 1) Establishing the issue or problem; 2) A profile of available data and statistics relevant to the issue; 3) Literature review of the topic; 4) Analysis of policies and programs relevant to the issue; 5) Recommendations to address the issue. The evaluation of the report will consist of oral presentation, written report, peer evaluations of group participation. (Section of Syllabus: EVALUATION STRATEGIES)
Identify biological and clinical changes associated with aging and their implications for prevention and successful aging.	GERO 6501 Biological Aspects of Aging	<u>Exams:</u> Consist of content comprehension questions about the topics covered in the course. (Section of Syllabus: EVALUATION STRATEGIES) – REQUIERE EDICION
	GERO 6505 Clinical Aspects of Aging	<u>Exams:</u> Consist of content comprehension questions about the topics covered in the course. (Section of Syllabus: EVALUATION STRATEGIES) – REQUIERE EDICION
Discuss the use of gerontological evaluations for the assessment of older adult needs, social participation and health promotion.	GERO 6503 Psychological Aspects of Aging	<u>Life Review Protocol Case Report:</u> From an applied perspective, students will conduct a Life Review protocol with a person aged 75 or older, that they will select and recruit. This protocol seeks to sharpen the students' communication skills and empathy with older adults by gathering information about their participant's life to nourish their learning experience. Students will provide partial case reports of their progress throughout the term (5 partial reports x 6% each = 30% of the final grade). At the end of the course students will work on a final report (20% of the final grade) that incorporates instructor's feedback during the partial case reports. The reports of all the interviews of reminiscence and gero-psychological evaluations will be discussed in class and be handed to the professor on the dates assigned in class. In the final report, students will use their analysis as the basis for proposing strategies that strengthen older adults' capacities and mental health. (30% + 20% = 50%. Partial case reports and final case reports account for 50% of the final grade). (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.e. Assessment of Competencies for MPH Gerontology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
Propose policy solutions aimed at guaranteeing a good quality of life for older adults.	GERO 6509 Policy and Management Aspects in Gerontology	<u>Policy Analysis Group Project:</u> Students will be divided into groups to conduct a policy analysis of an aging issue. A policy analysis provides informed advice related to a public policy decision. It is a process in which policy solutions are identified, analyzed and presented for social and public health problems. The final written policy analysis is a guided process throughout the trimester. Individual student performance will be evaluated through peer-evaluations and individual evaluations by the instructor. (Section of Syllabus: EVALUATION STRATEGIES)
Develop plans to address priority issues for the older adult population in the community	GERO 6507 Social Aspects of Aging	<u>Aging Issue Group Report:</u> Students will be divided in small groups and assigned a current issue in gerontology affecting aging populations. Student will analyze the social dimensions of the issue integrating course content with their own research on the subject. The report will consist of 1) Establishing the issue or problem; 2) A profile of available data and statistics relevant to the issue; 3) Literature review of the topic; 4) Analysis of policies and programs relevant to the Issue; 5) Recommendations to address the issue. The evaluation of the report will consist of oral presentation, written report, peer evaluations of group participation. (Section of Syllabus: EVALUATION STRATEGIES)
	GERO 6509 Policy and Management Aspects in Gerontology	<u>Policy Analysis Group Project:</u> Students will be divided into groups to conduct a policy analysis of an aging issue. A policy analysis provides informed advice related to a public policy decision. It is a process in which policy solutions are identified, analyzed and presented for social and public health problems. The final written policy analysis is a guided process throughout the trimester. Individual student performance will be evaluated through peer-evaluations and individual evaluations by the instructor. (Section of Syllabus: EVALUATION STRATEGIES)
	GERO 6503 Psychological Aspects of Aging	<u>Life Review Protocol Case Report:</u> From an applied perspective, students will conduct a Life Review protocol with a person aged 75 or older, that they will select and recruit. This protocol seeks to sharpen the students' communication skills and empathy with older adults by gathering information about their participant's life to nourish their learning experience. Students will provide partial case reports of their progress throughout the term (5 partial

TABLE D4.1.e. Assessment of Competencies for MPH Gerontology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		reports x 6% each = 30% of the final grade). At the end of the course students will work on a final report (20% of the final grade) that incorporates instructor's feedback during the partial case reports. The reports of all the interviews of reminiscence and gero-psychological evaluations will be discussed in class and be handed to the professor on the dates assigned in class. In the final report, students will use their analysis as the basis for proposing strategies that strengthen older adults' capacities and mental health. (30% + 20% = 50%. Partial case reports and final case reports account for 50% of the final grade). (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.f. Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
Apply theoretical, conceptual and methodological perspectives of health promotion and health education in the assessment of social, community and health issues.	EDSA 6401 Perspectives and settings in Health Promotion and Health Education	<u>Analysis of the application of theoretical, conceptual and methodological perspectives in the field of health promotion and health education through the interview with Health Education Professionals</u> : Students will interview Public Health Educators currently practicing and representing different health promotion and health education settings in Puerto Rico. The whole class will develop an interview guide to address how Health Education professionals consider and apply theoretical, conceptual, and methodological perspectives of health promotion and health education in their field of work. The interview guide must include questions about their roles and functions; approaches to assess social, community and individual health issues; most frequently used educational methodologies; opportunities and barriers within their professional work and an assessment of the situation of health education in the country. Individual interview findings will be discussed and analyzed in class. Students will submit an analytical essay about findings' implications for health promotion and health education practice and advancement. (Section of Syllabus: EVALUATION STRATEGIES)
	EDSA 6476 Social and Behavioral Theories and Models	<u>Theoretically based health education intervention to address a health or social need of a particular community group proposal</u> : Students will apply one theory or model to a contemporary community health problem and follow recommended guidelines that support the initial phases of program planning. Students will present their work to peers at the end of the trimester. This project will include the following guided steps: (1) identify the health and social needs of a particular community group (2) select a goal and objectives of an intervention, (3) describe a

TABLE D4.1.f. Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		Health Education Intervention and (4) apply the theoretical constructs to address a health or social need of a particular community group. (Section of Syllabus: EVALUATION STRATEGIES)
	EDSA 6475 Intervention Approaches for Health Promotion and Disease Prevention	<u>Written proposal for at least three Health Education and Health Promotion Interventions using health education principles, strategies, methods, and techniques to promote learning and change in diverse settings and populations:</u> Develop a theoretically based health promotion and health education written proposal for at least three interventions using health education principles, strategies, methods, and techniques to promote learning and change in diverse settings and populations to address an educational, health or social need of a particular individual, a group, and a community. Students will apply one theory or model to a contemporary group problem and follow recommended guidelines that support the initial phases of program planning. Students will present their work to peers at the end of the trimester. This project will include the following guided steps: (1) identify the health and social needs of a particular individual, group & community (2) select a goal and objectives of each intervention, (3) describe the importance of cultural competence in intervention planning, (4) apply the theoretical constructs to address a health or social need of a particular community group and (5) describe at least three Health Education Interventions in each level: Individual, Groups & Community. (Section of Syllabus: EVALUATION STRATEGIES)
	EDSA 6250 Applied Research in Health Promotion and Health Education	<u>Applied research concept proposal:</u> Students will present an applied research concept proposal to study and address a specific public health situation. Students will work progressively in the development of the paper by submitting its first parts initially and the final and complete document at the end of the course. The outcome should be an evidence-based project that demonstrates synthesis of research knowledge and adequate application of concepts, principles, techniques, and approaches learned throughout the course. (Section of Syllabus: EVALUATION STRATEGIES)
Plan interventions using health education principles, strategies, methods and techniques to promote learning and change.	EDSA 6475 Intervention Approaches for Health Promotion and Disease Prevention	<u>Written proposal for at least three Health Education and Health Promotion Interventions using health education principles, strategies, methods, and techniques to promote learning and change in diverse settings and populations:</u> Develop a theoretically based health promotion and health education written proposal for at least three interventions using health education principles, strategies, methods, and techniques to promote learning and change in diverse settings and populations to address an educational, health or social need of a particular individual, a group, and a community. Students will apply one theory or model to a contemporary group problem and follow recommended guidelines that support the initial phases of program planning. Students will present their work to peers at the end of the trimester. This project will include the

TABLE D4.1.f. Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		following guided steps: (1) identify the health and social needs of a particular individual, group & community (2) select a goal and objectives of each intervention, (3) describe the importance of cultural competence in intervention planning, (4) apply the theoretical constructs to address a health or social need of a particular community group and (5) describe at least three Health Education Interventions in each level: Individual, Groups & Community. (Section of Syllabus: EVALUATION STRATEGIES)
	EDSA 6568 Group Facilitation Skills	<u>Health education conceptualizations for group interventions:</u> Students will apply conceptual and methodological perspectives in the design, delivery, and evaluation of health education group interventions. Health education principles, strategies, methods, and techniques will be considered and used to plan and conduct multimedia group interventions. In-class activity interventions with peers will focus on topics related to group dynamics, processes, and facilitation skills that Health Educators should apply as Facilitators of learning experiences. Community activity interventions will be implemented based on identified community health or social needs and priority topics within community groups that may be addressed through the dissemination of health information and development of new knowledge and skills. Conceptualization development will be based on a guided design including an agenda, learning objectives, audiovisual and educational resources and materials, topic presentation and discussion, application/practice exercises, and evaluation. Students will discuss and review their conceptualization plan and related documentation to obtain professor approval prior to conducting the group intervention. Delivery and performance evaluation will be based on peer, professor, and self-feedback. Evaluation criteria will include: whether learning objectives were met, content organization and adequacy, activities and strategies implemented, creativity, facilitation skills, and others. Individual delivery and performance evaluation for competency attainment will be based on peer, professor, and self-feedback using an evaluation form (Section of Syllabus: EVALUATION STRATEGIES)
	EDSA 6573 Assessment and Planning in Health Promotion and Health Education	<u>Health Education and Health Promotion Program Planning Written Proposal and Oral Presentation</u> Written Proposal: Health Education and Health Promotion Program Planning Proposal: The student will develop a plan that addresses one of the identified health needs & cultural values & practices of the chosen target population through health education based on the findings from the assessment, other professional literature, and resources. The proposal must include the following steps: (1) identify the health and social needs of a particular community (2) describe policies that impact public health and health equity, (3) select a vision, mission, goal/s and objectives of the program, (4) describe the importance of cultural competence in

TABLE D4.1.f. Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		<p>intervention planning, (5) apply the theoretical constructs to address a health or social need of a particular community group, (6) describe at least three health education interventions using health education principles, strategies, methods, and techniques to promote learning and change, two health communication interventions and one intersectoral collaboration action for health promotion & (6) select methods to evaluate the program. For need assessment the student will assess population needs, assets, capacities and cultural values and practices that affect a community. The population needs, assets, capacities and cultural values and practices that affect a community must describe (in narrative and a figure) the assessment carried out according to Phases 1-4 of the PRECEDE-PROCEDE model by Lawrence Green or use Phase 1 and Phase 2 of the Simmons-Morton (1998) Multilevel Approach to Community Health (MATCH) planning model. The student will describe the methodology used to collect the data/information. The assessment must include at least secondary data analysis and informal conversations with key people. The student must present a secondary data analysis of the national core documents and statistics at the national and/or regional level and qualitative analysis of informal conversations with key people who are working with the community and with people from the community. The student must include all the areas, you must assess population needs as suggested in the planning model and must assess the capacities and cultural values and practices that affect a community. (Section of Syllabus: EVALUATION STRATEGIES for more details)</p> <p>Oral Presentation - The student will present Health Education and Health Promotion Proposal. The student will prepare a professional quality Power Point presentation and deliver a professional level oral presentation covering the main components. Students will make the oral presentation to peers/fellow students, course instructor, and at least 2 field health educators who have graduated from the Master in Public Health Education. The oral presentation considers the following criteria: content, organization, grammar and spelling, visual design, speaking skills, eye contact, personal appearance, and length. The peer/fellow student, course instructor, and the 2 field health educators that receive the proposal will have to complete the rubric of the oral presentation. (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D4.1.f. Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
	EDSA 6571 - Health Promotion and Health Education Evaluation and Measurement	<p><u>Logic model and theory of change:</u> Each student will have to develop the logical model and the theory of change of the project to which they will make their evaluation plan. The theory of change must apply the theoretical perspectives applied that will be the reference arc for its planning proposal to meet the identified need. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Evaluation plan:</u> Student will develop the evaluation plan of intervention project for health education issue. In this you will apply and integrate all the knowledge and skills developed throughout the course. The plan consists of introduction to the project evaluation proposal, the description of the planned project (goals, objectives, logical model and theory of change applied, a description of the areas of interest to evaluation, proposed evaluative design, and the methodology to be used. In addition, minimum necessary resources, principles and ethical considerations of the evaluation process. Instructions will be delivered to the classroom. (Section of Syllabus: EVALUATION STRATEGIES)</p>
Design health communication campaigns, projects and multimedia interventions to disseminate health information.	EDSA 6405 Health Communication Programs Design	<p><u>Health communication campaign written proposal:</u> Students will develop in small groups a multi-level health communication campaign proposal as suggested by the socio-ecological model and based on a critical issue for health promotion and/or disease prevention. Students will address the following components throughout the proposal: (1) identify a health or social issue for the campaign; (2) select a primary and secondary (if applicable) audience; (3) create a graphic identity for the campaign; (4) conduct preliminary market and audience research; (5) develop goals and objectives; (6) apply social marketing principles; (7) develop theory-based key messages and materials; (8) select theory-based health communication action areas, multiple channels, media and communication strategies; (9) and propose pre-testing and evaluation activities. Student will integrate media advocacy strategies related to the campaign topic by creating and submitting a newspaper column, and by developing a radio interview script to participate in a radio program. They will also develop a mock press release regarding the campaign kick-off event. Media advocacy related practice activities will be implemented throughout the course and the final version of the column, script and release will be included as appendixes of the written proposal. Intersectoral collaboration will be considered by identifying and analyzing potential partners/collaborating organizations as aligned to campaign goals and objectives and their role in supporting the development and implementation of the proposed campaign. Students will have a step-by-step guide to develop the proposal and a rubric with the evaluation criteria. The written proposal will include an Appendix with a list of each of the document sections specifying the names of the students responsible for developing that content. (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D4.1.f. Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		<u>Health communication campaign oral presentation</u> : Students will present their multi-level health communication campaign proposal using a digital poster format like those required at professional meetings. They will deliver a professional level oral presentation covering the major components of their campaign proposal. Presentations will be assessed on the following criteria: content, coherence, organization, creativity and speaking skills. Students will receive specific instructions regarding the components of the digital poster format and a rubric with the oral presentation evaluation criteria. (Section of Syllabus: EVALUATION STRATEGIES)
	EDSA 6568 Group Facilitation Skills	<u>Health education conceptualizations for group interventions</u> : Students will apply conceptual and methodological perspectives in the design, delivery, and evaluation of health education group interventions. Health education principles, strategies, methods, and techniques will be considered and used to plan and conduct multimedia group interventions. In-class activity interventions with peers will focus on topics related to group dynamics, processes, and facilitation skills that Health Educators should apply as Facilitators of learning experiences. Community activity interventions will be implemented based on identified community health or social needs and priority topics within community groups that may be addressed through the dissemination of health information and development of new knowledge and skills. Conceptualization development will be based on a guided design including an agenda, learning objectives, audiovisual and educational resources and materials, topic presentation and discussion, application/practice exercises, and evaluation. Students will discuss and review their conceptualization plan and related documentation to obtain professor approval prior to conducting the group intervention. Delivery and performance evaluation will be based on peer, professor, and self-feedback. Evaluation criteria will include: whether learning objectives were met, content organization and adequacy, activities and strategies implemented, creativity, facilitation skills, and others. Individual delivery and performance evaluation for competency attainment will be based on peer, professor, and self-feedback using an evaluation form (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.f. Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
4.Create proposals to provide health promotion and health education services in diverse settings and populations.	EDSA 6475 Intervention Approaches for Health Promotion and Disease Prevention	<u>Written proposal for at least three Health Education and Health Promotion Interventions using health education principles, strategies, methods, and techniques to promote learning and change in diverse settings and populations:</u> Develop a theoretically based health promotion and health education written proposal for at least three interventions using health education principles, strategies, methods, and techniques to promote learning and change in diverse settings and populations to address an educational, health or social need of a particular individual, a group, and a community. Students will apply one theory or model to a contemporary group problem and follow recommended guidelines that support the initial phases of program planning. Students will present their work to peers at the end of the trimester. This project will include the following guided steps: (1) identify the health and social needs of a particular individual, group & community (2) select a goal and objectives of each intervention, (3) describe the importance of cultural competence in intervention planning, (4) apply the theoretical constructs to address a health or social need of a particular community group and (5) describe at least three Health Education Interventions in each level: Individual, Groups & Community. (Section of Syllabus: EVALUATION STRATEGIES)
	EDSA 6474 Managerial Considerations for Developing and Implementing Health Education Programs	<u>Final written grant proposal for establishing a Health Education Program:</u> Students will develop an individual grant proposal for establishing a Health Education Program. The written proposal will include the following components: (1) Justification and description of the problem or situation; (2) Organization description; (3) Program objectives; (4) Description of proposed interventions; (5) Time line for the first year of implementation; (6) Target audience and expected participants; (7) Staff to be recruited; (8) Program marketing and participants' recruitment; (9) Potential collaboration with other organizations; (10) Evaluation plan; and (11) Budget and budget justification. Students will have a step-by-step guide to develop the proposal and a rubric with the evaluation criteria. (Section of Syllabus: EVALUATION STRATEGIES)
	EDSA 6250 Applied Research in Health Promotion and Health Education	<u>Applied research concept proposal:</u> Students will present an applied research concept proposal to study and address a specific public health situation. Students will work progressively in the development of the paper by submitting its first parts initially and the final and complete document at the end of the course. The outcome should be an evidence-based project that demonstrates synthesis of research knowledge and adequate application of concepts, principles, techniques, and approaches learned throughout the course. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.f. Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
Integrate health advocacy, social mobilization and intersectoral collaboration actions for health promotion, health education and disease prevention.	EDSA 6567 Advocacy, intersectionality and community action/mobilization	<p><u>Review and analysis of a public health policy related to Health Promotion, Health Education and disease prevention in the Puerto Rican national context-Forum:</u></p> <p>Students select an emerging topic or issue in Health Promotion, Health Education and disease prevention with a professor supervision. They will identify and analyze a public health policy on the topic of the Puerto Rican context. The analysis includes evaluating whether the policy incorporates health advocacy actions, intersectoral actions, and community mobilization. Students will complement the work with the guidance of other components of analysis provided by the professor. The analysis guide has been developed by the professor specifically for the course requirement. Students will make an oral presentation and written work on the topic. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	EDSA 6405 Health Communication Programs Design	<p><u>Health communication campaign written proposal:</u> Students will develop in small groups a multi-level health communication campaign proposal as suggested by the socio-ecological model and based on a critical issue for health promotion and/or disease prevention. Students will address the following components throughout the proposal: (1) identify a health or social issue for the campaign; (2) select a primary and secondary (if applicable) audience; (3) create a graphic identity for the campaign; (4) conduct preliminary market and audience research; (5) develop goals and objectives; (6) apply social marketing principles; (7) develop theory-based key messages and materials; (8) select theory-based health communication action areas, multiple channels, media and communication strategies; (9) and propose pre-testing and evaluation activities. Student will integrate media advocacy strategies related to the campaign topic by creating and submitting a newspaper column, and by developing a radio interview script to participate in a radio program. They will also develop a mock press release regarding the campaign kick-off event. Media advocacy related practice activities will be implemented throughout the course and the final version of the column, script and release will be included as appendixes of the written proposal. Intersectoral collaboration will be considered by identifying and analyzing potential partners/collaborating organizations as aligned to campaign goals and objectives and their role in supporting the development and implementation of the proposed campaign. Students will have a step-by-step guide to develop the proposal and a rubric with the evaluation criteria. The written proposal will include an Appendix with a list of each of the document sections specifying the names of the students responsible for developing that content. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Health communication campaign oral presentation:</u> Students will present their multi-level health communication campaign proposal using a digital poster format like those required at professional meetings. They will deliver a professional level oral presentation covering the major</p>

TABLE D4.1.f. Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		components of their campaign proposal. Presentations will be assessed on the following criteria: content, coherence, organization, creativity and speaking skills. Students will receive specific instructions regarding the components of the digital poster format and a rubric with the oral presentation evaluation criteria. (Section of Syllabus: EVALUATION STRATEGIES)
	EDSA 6573 Assessment and Planning in Health Promotion and Health Education	<p><u>Health Education and Health Promotion Program Planning Written Proposal and Oral Presentation</u></p> <p>Written Proposal - Health Education and Health Promotion Program Planning Proposal: The student will develop a plan that addresses one of the identified health needs & cultural values & practices of the chosen target population through health education based on the findings from the assessment, other professional literature, and resources. The proposal must include the following steps: (1) identify the health and social needs of a particular community (2) describe policies that impact public health and health equity, (3) select a vision, mission, goal/s and objectives of the program, (4) describe the importance of cultural competence in intervention planning, (5) apply the theoretical constructs to address a health or social need of a particular community group, (6) describe at least three health education interventions using health education principles, strategies, methods, and techniques to promote learning and change, two health communication interventions and one intersectoral collaboration action for health promotion & (6) select methods to evaluate the program. For need assessment the student will assess population needs, assets, capacities and cultural values and practices that affect a community. The population needs, assets, capacities and cultural values and practices that affect a community must describe (in narrative and a figure) the assessment carried out according to Phases 1-4 of the PRECEDE-PROCEDE model by Lawrence Green or use Phase 1 and Phase 2 of the Simmons-Morton (1998) Multilevel Approach to Community Health (MATCH) planning model. The student will describe the methodology used to collect the data/information. The assessment must include at least secondary data analysis and informal conversations with key people. The student must present a secondary data analysis of the national core documents and statistics at the national and/or regional level and qualitative analysis of informal conversations with key people who are working with the community and with people from the community. The student must include all the areas, you must assess population needs as suggested in the planning model and must assess the capacities and cultural values and practices that affect a community. (Section of Syllabus: EVALUATION STRATEGIES for more details)</p> <p>Oral Presentation - The student will present Health Education and Health Promotion Proposal. The student will prepare a professional quality Power Point presentation and deliver a professional level oral presentation covering the main components. Students will make the oral</p>

TABLE D4.1.f. Assessment of Competencies for Master in Public Health Education		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		presentation to peers/fellow students, course instructor, and at least 2 field health educators who have graduated from the Master in Public Health Education. The oral presentation considers the following criteria: content, organization, grammar and spelling, visual design, speaking skills, eye contact, personal appearance, and length. The peer/fellow student, course instructor, and the 2 field health educators that receive the proposal will have to complete the rubric of the oral presentation. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.g. Assessment of Competencies for DrPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
Communicate environmental public health issues based on scientific, ethical, environmental justice, and community-based principles.	SAAM 8016 Environmental Policy and Management	<p><u>Case studies:</u> An environmental issue will be assigned by the instructor. The case will be presented by the student, and he/she will answer the questions raised by the environmental issue assigned. Each question will have its value indicated on the examination. The exercises will be based on analysis of a real facts and data or the interpretation of one or more legal statutes. Students are expected to analyze the legal and regulatory system involved in the assigned issue for case study analysis. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Oral presentation:</u> Each student will prepare a presentation in Power Point on one of the topics of the course and covering the subject at the level of Puerto Rico, United States or globally. In the presentation, a public policy will be designed, or recommendations will be made to improve existing legislation. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	SAAM 8017 Health Risk Assessment	<p><u>Project on risk assessment:</u> Students will be assigned an environmental problem situation as the class main project. They will have to assess the risk associated with that particular situation following the steps of the risk assessment process and will propose recommendations that may impact the regulatory decision-making process to protect the human, taking into consideration ethical, environmental justice, and community-based principles. At the end of the trimester, they will deliver in class a formal oral presentation about their case, conclusions, and recommendations (15% of the final grade). During presentations, the class will adopt a posture of peer reviewers asking questions (critiques) about the risk assessment process to the presenter(s). In addition, they will have to write a final document (20% of the final grade) that will also include the</p>

TABLE D4.1.g. Assessment of Competencies for DrPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		recommendations provided by the audience. During the trimester, professors will meet with students to discuss a preliminary draft of the work they are conducting. For these discussions, students need to be prepared for answering questions professors may have. The discussion of this draft represents 5% of the final grade. Also, students will develop a fact sheet for the layperson about the chemical substance(s) of greatest concern in the assigned case study (5% of the final grade). (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 8120 Changing Climate: A Public Health Response	<u>Assessing health vulnerability to climate change:</u> Students will be divided in Working Groups (WG) the first week of the course. Each WG must select within the first two week of the course a specific topic related with a climatic change aspect and Public Health. Students will integrate exposure assessment study to address a climate change issue previously identified. Students will be analyzing the research evidence and connections among climate, human health and well-being and propose sustainable and resilient strategies to face climate change. Oral Presentation: Students must present to the professor and classmates the final oral presentation the penultimate week of the course. The presentation will be assess using an evaluation rubric. The selected topic shall be explained and shall be exposed for a total of 20 minutes. All group members must participate as equal. Audience (students) will be participating as peer reviewers asking questions to the presenters about the oral presentation. During the trimester, the professor will meet with students to discuss a preliminary draft of the work they are conducting.
Analyze the impact of environmental legislation, judicial opinions, regulations, and policies on population health to influence decision-making.	SAAM 8015 Global Changes, Health, and International Legislation	<u>Final project:</u> The final project consists of the design of a new treaty or international legislation related to any environmental global problem. Students must analyze existing environmental legislation, regulations, and policy strengths and weaknesses to support the design of their proposed treaty or legislation. The student will incorporate the revision and background of this legislation in the Preamble of the treaty or the Explained Presentation of the proposed local legislation. The professor will guide the student in the preparation of such legislation. The student will present to the group through a PowerPoint of the legislation designed and incorporate any recommendations made by the professor or the group. The final product will be corrected by the professor following a grading rubric. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 8016 Environmental Policy and Management	<u>Case studies:</u> An environmental issue will be assigned by the instructor. The case will be presented by the student, and he/she will answer the questions raised by the environmental issue assigned. Each question will have its value indicated on the examination. The exercises will be based on analysis of a real facts and data or the interpretation of one or more legal statutes. Students are

TABLE D4.1.g. Assessment of Competencies for DrPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		<p>expected to analyze the legal and regulatory system involved in the assigned issue for case study analysis. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Oral presentation:</u> Each student will prepare a presentation in Power Point on one of the topics of the course and covering the subject at the level of Puerto Rico, United States or globally. In the presentation, a public policy will be designed, or recommendations will be made to improve existing legislation. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	SAAM 8118 Prevention and Control of Environmental Hazards: A Systems Thinking Approach	<p><u>Policy Bill with all its components:</u> at the end of the course students have to submit a final written Policy Bill, following a format provided by the instructor. This project has the following two main components: Research or Technical Report in which environmental evidence-based research and the pertinent regulatory system is used in the analysis, and the Policy Bill meant to address the situation. The Research Report and the Policy Bill will be assessed using both a content checklist and a rubric. (Section of Syllabus: EVALUATION STRATEGIES)</p>
Design policies to improve environmental public health issues.	SAAM 8015 Global Changes, Health, and International Legislation	<p><u>Final project:</u> The final project consists of the design of a new treaty or international legislation related to any environmental global problem. Students must analyze existing environmental legislation, regulations, and policy strengths and weaknesses to support the design of their proposed treaty or legislation. The student will incorporate the revision and background of this legislation in the Preamble of the treaty or the Explained Presentation of the proposed local legislation. The professor will guide the student in the preparation of such legislation. The student will present to the group through a PowerPoint the legislation designed and incorporate any recommendations made by the professor or the group. The final product will be corrected by the professor following a rubric. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	SAAM 8016 Environmental Policy and Management	<p><u>Case studies:</u> An environmental issue will be assigned by the instructor. The case will be presented by the student, and he/she will answer the questions raised by the environmental issue assigned. Each question will have its value indicated on the examination. The exercises will be based on analysis of a real facts and data or the interpretation of one or more legal statutes. Students are expected to analyze the legal and regulatory system involved in the assigned issue for case study analysis. (Section of Syllabus: EVALUATION STRATEGIES)</p> <p><u>Oral presentation:</u> Each student will prepare a presentation in Power Point on one of the topics of the course and covering the subject at the level of Puerto Rico, United States or globally. In the presentation, a public policy will be designed, or recommendations will be made to improve existing legislation. (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D4.1.g. Assessment of Competencies for DrPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
	SAAM 8118 Prevention and Control of Environmental Hazards: A Systems Thinking Approach	<u>Policy Bill with all its components</u> : at the end of the course students have to submit a final written Policy Bill, following a format provided by the instructor. This project has the following two main components: Research or Technical Report in which environmental evidence-based research and the pertinent regulatory system is used in the analysis, and the Policy Bill meant to address the situation. This evaluation criterion has a weight of 40% on the final grade. The Research Report and the Policy Bill will be assessed using both a content checklist and a rubric. (Section of Syllabus: EVALUATION STRATEGIES)
Evaluate environmental risks and the impact of environmental changes on human and community health from a public health perspective.	SAAM 8017 Health Risk Assessment	<u>Project on risk assessment</u> : Students will be assigned an environmental problem situation as the class main project. They will have to assess the risk associated with that particular situation following the steps of the risk assessment process and will propose recommendations that may impact the regulatory decision-making process to protect the human, taking into consideration ethical, environmental justice, and community-based principles. At the end of the trimester, they will deliver in class a formal oral presentation about their case, conclusions, and recommendations (15% of the final grade). During presentations, the class will adopt a posture of peer reviewers asking questions (critiques) about the risk assessment process to the presenter(s). In addition, they will have to write a final document (20% of the final grade) that will also include the recommendations provided by the audience. During the trimester, professors will meet with students to discuss a preliminary draft of the work they are conducting. For these discussions, students need to be prepared for answering questions professors may have. The discussion of this draft represents 5% of the final grade. Also, students will develop a fact sheet for the layperson about the chemical substance(s) of greatest concern in the assigned case study (5% of the final grade). (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 8119 Exposure Assessment for Environmental Public Health	<u>Exposure assessment study design</u> : In this final work, students will integrate the acquired knowledge to propose an exposure assessment study design to address an environmental health risk issue previously identified. They will have to review recent scientific literature to identify an appropriate exposure assessment method that would allow them to evaluate the issue of concern, identifying the strengths and limitations of the exposure method proposed in the context of the selected problem. At the end of the trimester, they will deliver in class a formal oral presentation about their scenario and defend the study they are proposing (15% of the final grade). During presentations, the class will adopt a posture of peer reviewers asking questions (critiques) to the presenter about the proposed study. In addition, they will write a final document (20% of the final

TABLE D4.1.g. Assessment of Competencies for DrPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		grade) that will also include the recommendations provided by the audience. During the trimester, professors will meet with students to discuss a preliminary draft of the work they are conducting. For these discussions, students need to be prepared for answering questions professors may have. The discussion of this draft represents 5% of the final grade. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 8120 Changing Climate: A Public Health Response	<u>Assessing health vulnerability to climate change:</u> Students will be divided in Working Groups (WG) the first week of the course. Each WG must select within the first two week of the course a specific topic related with a climatic change aspect and Public Health. Students will integrate exposure assessment study to address a climate change issue previously identified. Students will be analyzing the research evidence and connections among climate, human health and well-being and propose sustainable and resilient strategies to face climate change. Oral Presentation: Students must present to the professor and classmates the final oral presentation the penultimate week of the course. The presentation will be assess using an evaluation rubric. The selected topic shall be explained and shall be exposed for a total of 20 minutes. All group members must participate as equal. Audience (students) will be participating as peer reviewers asking questions to the presenters about the oral presentation. During the trimester, the professor will meet with students to discuss a preliminary draft of the work they are conducting.
Integrate evidence-based research on environmental health to advance programs, policies, or systems promoting population health and well-being.	SAAM 8118 Prevention and Control of Environmental Hazards: A Systems Thinking Approach	<u>Policy Bill with all its components:</u> at the end of the course students have to submit a final written Policy Bill, following a format provided by the instructor. This project has the following two main components: Research or Technical Report in which environmental evidence-based research and the pertinent regulatory system is used in the analysis, and the Policy Bill meant to address the situation. This evaluation criterion has a weight of 40% on the final grade. The Research Report and the Policy Bill will be assessed using both a content checklist and a rubric. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 8119 Exposure Assessment for Environmental Public Health	<u>Exposure assessment study design:</u> In this final work, students will integrate the acquired knowledge to propose an exposure assessment study design to address an environmental health risk issue previously identified. They will have to review recent scientific literature to identify an appropriate exposure assessment method that would allow them to evaluate the issue of concern, identifying the strengths and limitations of the exposure method proposed in the context of the selected problem. At the end of the trimester, they will deliver in class a formal oral presentation about their scenario and defend the study they are proposing (15% of the final grade). During

TABLE D4.1.g. Assessment of Competencies for DrPH Environmental Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
		presentations, the class will adopt a posture of peer reviewers asking questions (critiques) to the presenter about the proposed study. In addition, they will write a final document (20% of the final grade) that will also include the recommendations provided by the audience. During the trimester, professors will meet with students to discuss a preliminary draft of the work they are conducting. For these discussions, students need to be prepared for answering questions professors may have. The discussion of this draft represents 5% of the final grade. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 8120 Changing Climate: A Public Health Response	<u>Assessing health vulnerability to climate change:</u> Students will be divided in Working Groups (WG) the first week of the course. Each WG must select within the first two week of the course a specific topic related with a climatic change aspect and Public Health. Students will integrate exposure assessment study to address a climate change issue previously identified. Students will be analyzing the research evidence and connections among climate, human health and well-being and propose sustainable and resilient strategies to face climate change. Oral Presentation: Students must present to the professor and classmates the final oral presentation the penultimate week of the course. The presentation will be assess using an evaluation rubric. The selected topic shall be explained and shall be exposed for a total of 20 minutes. All group members must participate as equal. Audience (students) will be participating as peer reviewers asking questions to the presenters about the oral presentation. During the trimester, the professor will meet with students to discuss a preliminary draft of the work they are conducting.

TABLE D4.1.h. Assessment of Competencies for DrPH Health System Analysis and Management		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
Uses the economic, financial, social, legal, regulatory, organizational and policy dimensions in decision making regarding structure, process, and outcomes of public health systems.	ADSS 8006 Health Law	<u>Research Paper</u> : Student will prepare a 25-35 page paper that: a) describes the problem to be addressed; .b) identifies specific objectives, method and limitations; c) describes policy goals and peer review articles related; d) includes policy options or recommendations to address the problem; e) applies legal or regulatory, economic, financial, social, organizational, policy or results of public health systems aspects pertinent to the object of the study; f) articulates the impact or implications of: social justice, legal, political, ethical, policy options that may influence the public health system in decision-making, as applicable to the research conducted (Section of Syllabus: EVALUATION STRATEGIES)
	ADSS 8007 Health Policy	<u>Policy Analysis Paper</u> : Students will develop a policy analysis paper in a topic related to their own interest. This paper should follow the format that will be provided by the professor. The analysis must take into consideration the relevant economic, financial, social, and legal dimensions of the chosen topic. It must also consider the social justice and ethical implications in the selected topic. The Policy Paper is designed to enable the student to study, through the duration of the course, an issue in detail, to understand how policy options influence health systems decisions. The student will examine how ideology and competing interests may influence social justice, legal, political, and ethical implications of these policy decisions. The goal of the policy paper is to learn how to examine a health policy issue or topic from a variety of perspectives, using this information as a foundation for policy decision making. The opportunity of examining policy proposals, reform initiatives and programs, over an extended period of time, provides historical context on policy decisions made in different circumstances over that period of time. The analysis of these works through time allows to appraise the impact of health systems policy-making processes and policy implementation in public health. The policy paper is a group exercise in which each student assumes the responsibility for a specific part of the project and works with classmates to complete the project. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.h. Assessment of Competencies for DrPH Health System Analysis and Management		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
	ADSS 8009 Measurement of Quality and Outcomes in Health Systems	<u>Monograph:</u> Students will develop and complete an original monograph in a topic related to quality indicators regarding structure, process, and outcomes of health systems. This monograph will discuss the state of the health system's quality and/or outcomes of a population group or healthcare sector. It will present data sources and indicators used to describe the topic selected. It will discuss the gaps in knowledge in this area; limitations encountered in availability of indicators and/or data sources; and its impact in the public health policymaking and implementation processes. The analysis will consider the application of quantitative and qualitative methods for health system decision making related to the indicators included in the discussion, such as, measurement issues. In addition, it will propose recommendations to fill any of these gaps. The monograph should be typed in a legible font not bigger than 12pt, double-spaced. It will be no longer than 16 pages and not shorter than 8 pages without counting the references. It should include a minimum of 10 references. A hardcopy of the monograph should be given to the professor as scheduled in the class calendar. (Section of Syllabus: EVALUATION STRATEGIES)
	ADSS 8010 Organizational Development and Change in Health Services Organizations	<u>Application Papers:</u> The purpose of the project is to provide students with an opportunity to examine the nature of change and OD in an actual organizational context. The students will apply system theory approach to present their analysis and recommendations. An excellent paper is one that combines both rich description of the underlying change and OD initiatives with a thorough and informed (by the readings) analysis and critique. Papers should be 12 points, double-spaced, should adhere to APA style, and should include scholarly references. The student will also be able to exhibit analyzing and evaluating skills on the health system, organizational change and development related models and approaches to improve the health system outcomes. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.h. Assessment of Competencies for DrPH Health System Analysis and Management

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
	ADSS 8205 Financial Management in Health Systems	<p><u>Final Exam - Written Application Project:</u> This written application project will be based on a real or fictional case with the objective to cover the entire course content (integrative), meaning that it's the course's learning assessment opportunity to demonstrate the assimilation of all course competencies. The students will need a systems theory mindset to pinpoint possible health system's finance management issues in the different stages of a health system such as input, process, output, and feedback for each of the health system's schemes. In addition, every health system has to be in financial equilibrium as the general principle of systems theory proposes. In this process of financial systemic evaluation students will need to apply qualitative and quantitative finance methods to do decision making that can impact the actual health system's economic, social, legal and provision of services policies with special interest in the financial policy.</p> <p><u>Final Exam- Oral Application Project:</u> This oral presentation of the written application project will be a learning assessment opportunity to demonstrate the assimilation of the course's competencies orally. In addition, it will be a learning opportunity to learn from the remarks and critical thinking that the group and the professor adjudicates to the oral presentation of the written application project. This oral experience represents an individual learning assessment opportunity for each doctoral student so that an individual learning accomplishment in health system finance theory can be detected and evaluated. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	ADSS 8206 Economic Analysis for Health System	<p><u>Written Report:</u> Students will write a scientific monograph on a topic related to the economics of health services or health systems chosen from a list of topics submitted by the professor. The report will be prepared following a set of guiding questions provided by the professor. The report should include the following sections: introduction, literature review, methods, results and findings, analysis, and conclusions. Student must demonstrate the effective application of economic analysis models and methods presented in the course in decision-making process regarding structure, process, and outcomes of health systems. The analysis will describe the application of quantitative and qualitative methods for health system decision making. A rubric will be provided by the professor detailing and explaining</p>

TABLE D4.1.h. Assessment of Competencies for DrPH Health System Analysis and Management		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		the criteria used to evaluate the report. A digital and hardcopy of the report should be given to the professor as scheduled in the class calendar. (Section of Syllabus: EVALUATION STRATEGIES)
Appraises the impact of health systems policy-making processes and policy implementation in public health.	ADSS 8006 Health Law	<u>Research Paper:</u> Student will prepare a 25-35 page paper that: a) describes the problem to be addressed; .b) identifies specific objectives, method and limitations; c) describes policy goals and peer review articles related; d) includes policy options or recommendations to address the problem; e) applies legal or regulatory, economic, financial, social, organizational, policy or results of public health systems aspects pertinent to the object of the study; f) articulates the impact or implications of: social justice, legal, political, ethical, policy options that may influence the public health system in decision-making, as applicable to the research conducted (Section of Syllabus: EVALUATION STRATEGIES)
	ADSS 8007 Health Policy	<u>Policy Analysis Paper:</u> Students will develop a policy analysis paper in a topic related to their own interest. This paper should follow the format that will be provided by the professor. The analysis must take into consideration the relevant economic, financial, social, and legal dimensions of the chosen topic. It must also consider the social justice and ethical implications in the selected topic. The Policy Paper is designed to enable the student to study, through the duration of the course, an issue in detail, to understand how policy options influence health systems decisions. The student will examine how ideology and competing interests may influence social justice, legal, political, and ethical implications of these policy decisions. The goal of the policy paper is to learn how to examine a health policy issue or topic from a variety of perspectives, using this information as a foundation for policy decision making. The opportunity of examining policy proposals, reform initiatives and programs, over an extended period of time, provides historical context on policy decisions made in different circumstances over that period of time. The analysis of these works through time allows to appraise the impact of health systems policy-making processes and policy implementation in public health. The policy paper is a group exercise in which each student assumes the responsibility for a specific part of the project and works with classmates to complete the project. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.h. Assessment of Competencies for DrPH Health System Analysis and Management

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
	ADSS 8307 Health Services Evaluation	<u>Request for Proposal or Terms of Reference:</u> The final work consists of preparing a request for proposal or Terms of Reference (ToR) for an external evaluation of an assigned health program component. It should include the specifics about the project or program and its context, the evaluation –the purpose, scope, rationale for the evaluation in terms of why the program is needed and target population, key evaluation questions and evaluation methodology (or how they should be developed) – the reporting requirements, milestones or deliverables, time frames, and relevant contractual requirements. It should also describe the decision-making processes, including roles and responsibilities of different actors and how the decisions will be made. It should clarify whether the evaluation design will be developed as part of the ToR, as the first stage of the evaluation, or as a separate project. The request for an evaluation proposal of ToR will be based on the organizational problem selected by the student, evidenced by the assessment of the impact of the program or policy implemented. In addition, social justice, legal, political, and ethical implications of policy options will be considered. It will contribute 40% of the final grade. Detailed guidelines will be provided. (Section of Syllabus: EVALUATION STRATEGIES)
Integrate the principles of system theory for the analysis and evaluation of health services organizations.	ADSS 8010 Organizational Development and Change in Health Services Organizations	<u>Application Papers:</u> The purpose of the project is to provide students with an opportunity to examine the nature of change and OD in an actual organizational context. The students will apply system theory approach to present their analysis and recommendations. An excellent paper is one that combines both rich description of the underlying change and OD initiatives with a thorough and informed (by the readings) analysis and critique. Papers should be 12 points, double-spaced, should adhere to APA style, and should include scholarly references. The student will also be able to exhibit analyzing and evaluating skills on the health system, organizational change and development related models and approaches to improve the health system outcomes. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.h. Assessment of Competencies for DrPH Health System Analysis and Management

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
	ADSS 8205 Financial Management in Health Systems	<p><u>Final Exam - Written Application Project:</u> this written application project will be based on a real or fictional case with the objective to cover the entire course content (integrative), meaning that it's the course's learning assessment opportunity to demonstrate the assimilation of all course competencies. The students will need a systems theory mindset to pinpoint possible health system's finance management issues in the different stages of a health system such as input, process, output, and feedback for each of the health system's schemes. In addition, every health system has to be in financial equilibrium as the general principle of systems theory proposes. In this process of financial systemic evaluation students will need to apply qualitative and quantitative finance methods to do decision making that can impact the actual health system's economic, social, legal and provision of services policies with special interest in the financial policy.</p> <p><u>Final Exam - Oral Application Project:</u> this oral presentation of the written application project will be a learning assessment opportunity to demonstrate the assimilation of the course's competencies orally. In addition, it will be a learning opportunity to learn from the remarks and critical thinking that the group and the professor adjudicates to the oral presentation of the written application project. This oral experience represents an individual learning assessment opportunity for each doctoral student so that an individual learning accomplishment in health system finance theory can be detected and evaluated. (Section of Syllabus: EVALUATION STRATEGIES)</p>
Demonstrates proficiency in the application of quantitative and qualitative methods for health system decision making.	ADSS 8009 Measurement of Quality and Outcomes in Health Systems	<p><u>Monograph:</u> Students will develop and complete an original monograph in a topic related to quality indicators regarding structure, process, and outcomes of health systems. This monograph will discuss the state of the health system's quality and/or outcomes of a population group or healthcare sector. It will present data sources and indicators used to describe the topic selected. It will discuss the gaps in knowledge in this area; limitations encountered in availability of indicators and/or data sources; and its impact in the public health policymaking and implementation processes. The analysis will consider the application of quantitative and qualitative methods for health system decision making related to the indicators included in the discussion, such as, measurement issues. In addition, it will propose</p>

TABLE D4.1.h. Assessment of Competencies for DrPH Health System Analysis and Management		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		recommendations to fill any of these gaps. The monograph should be typed in a legible font not bigger than 12pt, double-spaced. It will be no longer than 16 pages and not shorter than 8 pages without counting the references. It should include a minimum of 10 references. A hardcopy of the monograph should be given to the professor as scheduled in the class calendar. (Section of Syllabus: EVALUATION STRATEGIES)
	ADSS 8205 Financial Management in Health Systems	<p><u>Final Exam - Written Application Project:</u> this written application project will be based on a real or fictional case with the objective to cover the entire course content (integrative), meaning that it's the course's learning assessment opportunity to demonstrate the assimilation of all course competencies. The students will need a systems theory mindset to pinpoint possible health system's finance management issues in the different stages of a health system such as input, process, output, and feedback for each of the health system's schemes. In addition, every health system has to be in financial equilibrium as the general principle of systems theory proposes. In this process of financial systemic evaluation students will need to apply qualitative and quantitative finance methods to do decision making that can impact the actual health system's economic, social, legal and provision of services policies with special interest in the financial policy.</p> <p><u>Final Exam - Oral Application Project:</u> this oral presentation of the written application project will be a learning assessment opportunity to demonstrate the assimilation of the course's competencies orally. In addition, it will be a learning opportunity to learn from the remarks and critical thinking that the group and the professor adjudicates to the oral presentation of the written application project. This oral experience represents an individual learning assessment opportunity for each doctoral student so that an individual learning accomplishment in health system finance theory can be detected and evaluated. . (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D4.1.h. Assessment of Competencies for DrPH Health System Analysis and Management		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
	ADSS 8206 Economic Analysis for Health System	<u>Written Report</u> : Students will write a scientific monograph on a topic related to the economics of health services or health systems chosen from a list of topics submitted by the professor. The report will be prepared following a set of guiding questions provided by the professor. The report should include the following sections: introduction, literature review, methods, results and findings, analysis, and conclusions. Student must demonstrate the effective application of economic analysis models and methods presented in the course in decision-making process regarding structure, process, and outcomes of health systems. The analysis will describe the application of quantitative and qualitative methods for health system decision making. A rubric will be provided by the professor detailing and explaining the criteria used to evaluate the report. A digital and hardcopy of the report should be given to the professor as scheduled in the class calendar. (Section of Syllabus: EVALUATION STRATEGIES)
	ADSS 8305 - Health Services Research	<u>Written HS research proposal</u> : Students will develop and complete a research original proposal in a topic related to health services research. The topic should be in an applied area, directed to problem solving in a specific public health activity or interdisciplinary program, and should advance the practice of public health. It has to follow one of the levels of health services research: Basic or Method- oriented research, Basic Policy Research project, Health Services Program Evaluation or Evaluative Policy Research. This proposal should follow the format described in the dissertation manual to be discussed in class. The proposal should describe the study problem based on current knowledge within the corresponding content area. It must include basic information pointing the antecedents of the research problem, including a rationale of the impact of health systems policy-making processes and policy implementation in the public health problem addressed by the research project. The document will propose how this project will fill gaps in knowledge and explain how it will contribute to public health. The methods to implement the project should be clearly described including quantitative, qualitative, or mixed methods approaches and their results' potential implications for health policy. Specifically, it will include a detailed description of the study design, sampling, measurement issues and statistical analyses plan, as described in the instructions. The student should demonstrate proficiency in the application of quantitative and

TABLE D4.1.h. Assessment of Competencies for DrPH Health System Analysis and Management		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		qualitative methods for health system decision making. It could be a pre-proposal of the one the student will follow for his/her dissertation as requirement for completing the doctoral degree. A final copy of the proposal should be given to the professor as scheduled in the class calendar. (Section of Syllabus: EVALUATION STRATEGIES)
Articulates the impact of social justice, legal, political, and ethical implications of policy options that may influence the public health system decision-making.	ADSS 8006 Health Law	<u>Research Paper</u> : Student will prepare a 25-35 page paper that: a) describes the problem to be addressed; .b) identifies specific objectives, method and limitations; c) describes policy goals and peer review articles related; d) includes policy options or recommendations to address the problem; e) applies legal or regulatory, economic, financial, social, organizational, policy or results of public health systems aspects pertinent to the object of the study; f) articulates the impact or implications of: social justice, legal, political, ethical, policy options that may influence the public health system in decision-making, as applicable to the research conducted (Section of Syllabus: EVALUATION STRATEGIES)
	ADSS 8007 Health Policy	<u>Policy Analysis Paper</u> – Students will develop a policy analysis paper in a topic related to their own interest. This paper should follow the format that will be provided by the professor. The analysis must take into consideration the relevant economic, financial, social and legal dimensions of the chosen topic. It must also consider the social justice and ethical implications in the selected topic. The Policy Paper is designed to enable the student to study, through the duration of the course, an issue in detail, to understand how policy options influence health systems decisions. The student will examine how ideology and competing interests may influence social justice, legal, political, and ethical implications of these policy decisions. The goal of the policy paper is to learn how to examine a health policy issue or topic from a variety of perspectives, using this information as a foundation for policy decision making. The opportunity of examining policy proposals, reform initiatives and programs, over an extended period of time, provides historical context on policy decisions made in different circumstances over that period of time. The analysis of these works through time allows to appraise the impact of health systems policy-making processes and policy implementation in public health. The policy paper is a group exercise in which each student assumes the responsibility for a specific part

TABLE D4.1.h. Assessment of Competencies for DrPH Health System Analysis and Management		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		of the project and works with classmates to complete the project. (Section of Syllabus: EVALUATION STRATEGIES)
	ADSS 8307 Health Services Evaluation	<u>Request for Proposal or Terms of Reference:</u> The final work consists of preparing a request for proposal or Terms of Reference (ToR) for an external evaluation of an assigned health program component. It should include the specifics about the project or program and its context, the evaluation –the purpose, scope, rationale for the evaluation in terms of why the program is needed and target population, key evaluation questions and evaluation methodology (or how they should be developed) – the reporting requirements, milestones or deliverables, time frames, and relevant contractual requirements. It should also describe the decision-making processes, including roles and responsibilities of different actors and how the decisions will be made. It should clarify whether the evaluation design will be developed as part of the ToR, as the first stage of the evaluation, or as a separate project. The request for an evaluation proposal of ToR will be based on the organizational problem selected by the student, evidenced by the assessment of the impact of the program or policy implemented. In addition, social justice, legal, political, and ethical implications of policy options will be considered. It will contribute 40% of the final grade. Detailed guidelines will be provided. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D4.1.i. Assessment of Competencies for DrPH Social Determinants of Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
Evaluate emergent public health problems through the critical examination of public health discourses and historical practices to advance health equity.	DESS 8105 Social Theory and Public Health	<p><u>Final Paper on Theoretical Approach to Public Health Issue.</u> Students will write a paper on a public health issue or social determinant of health in which they evaluate the theoretical approaches used to define and address the issue and the implications it has for health equity. The paper must include the following:</p> <ol style="list-style-type: none"> 1) Description of the public health/SDH issue or problem. 2) Description of a common approach to the problem in the public health peer reviewed literature. 3) Provide an example of this approach in public health practice through the analysis and critique of a technical report, policy document or intervention document as an example or case for analysis. 4) Discussion and evaluation of the approach based on the theories and critiques discussed in class. 5) Propose an alternative recommendation based on the goal of equity in health. (Section of Syllabus: EVALUATION STRATEGIES)
	DESS 8202 Statistical Measurement and Argumentation in Social Determinants of Health	<p><u>Final Essay:</u> Students will write an essay that presents the evaluative argument that a specific statistical concept, method, or practice as constituted has a negative impact on equity in health (broadly defined.) This argument can be, for example, that a poverty metric or ethnic classification is not appropriate for Puerto Rico. Students' evaluation will be based on a critical examination of the statistical concept's theoretical basis and its use in public health policy and practice. The paper must include the following.</p> <ol style="list-style-type: none"> 1. Description of the selected statistical concept, method, or practice. 2. Description of the relevance of such concept, method, or practice. 3. Explicit presentation of the claim, the evidence and the warrant (justification) of the argument. 4. Presentation of a conceptual visual model to facilitate any aspect of the argument. 5. Explanation of who benefits and who is harmed using such concept, method, or practice. 6. The paper must back the argument with required readings of the course. <p>(Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D4.1.i. Assessment of Competencies for DrPH Social Determinants of Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
	DESS 8201- Qualitative Methods in Social Determinants of Health	<p><u>Qualitative Research Proposal:</u> This is the final work of the course. Students will design an applied research proposal to address a relevant social determinant of health research question. Proposal will be written in: Arial, 1.5-line spacing, length 15 pages (excluding references and appendixes). Students must develop a research proposal considering public health discourses including the following:</p> <ol style="list-style-type: none"> Specific aims (page 1) Research strategy (Page 2-6) <ol style="list-style-type: none"> Significance Innovation Approach Conceptual framework <ol style="list-style-type: none"> Studies Methods: <ol style="list-style-type: none"> Participants Instruments Procedure Analysis References (Not included in the limit of pages) Appendixes (Not included in the limit of pages) <p>(Section of Syllabus: EVALUATION STRATEGIES)</p>
	DESS 8305 Health and Social Policy Analysis	<p><u>Policy Paper:</u> Students will be required to produce a policy paper concerning a specific health issue analysis from a social determinant of health perspective and recommendations for action. Every student will present his or her work for group discussion. Further details of the writing of this paper and presentation will be provided and discussed the first meeting class. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	DESS 8208- Political Economy of Health	<p><u>Final Essay:</u> Students will write a concept paper that justifies the incorporation of a political economy of health perspective for the study of a specific public health problem. Word extension: 2000 words. The paper must include the following.</p> <ol style="list-style-type: none"> Description of the selected public health problem. The relevance of addressing that problem for achieving social justice in health. Traditional ways of studying that problem. How to apply a political economy perspective into that problem.

TABLE D4.1.i. Assessment of Competencies for DrPH Social Determinants of Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		5. Political advantages of dealing with that problem from a political economy perspective. (Section of Syllabus: EVALUATION STRATEGIES)
Apply social theories, political economy and intersectoral analysis to address public health issues in diverse scenarios.	DESS 8202-Statistical Measurement and Argumentation in Social Determinants of Health	<p><u>Final Essay:</u> Students will write an essay that presents the evaluative argument that a specific statistical concept, method, or practice constitutes harms equity in health (broadly defined.) This argument can be, for example, that a poverty metric or ethnic classification is not appropriate for Puerto Rico. Students' evaluation will be based on a critical examination of the statistical concept's theoretical basis and its use in public health policy and practice. The paper must include the following.</p> <ol style="list-style-type: none"> 1. Description of the selected statistical concept, method, or practice. 2. Description of the relevance of such concept, method, or practice. 3. Explicit presentation of the claim, the evidence and the warrant (justification) of the argument. 4. Presentation of a conceptual visual model to facilitate any aspect of the argument. 5. Explanation of who benefits and who is harmed using such concept, method, or practice. 6. The paper must back the argument with required readings of the course. <p>(Section of Syllabus: EVALUATION STRATEGIES)</p>
	DESS 8208- Political Economy of Health	<p><u>Final Essay:</u> Students will write a concept paper that justifies the incorporation of a political economy of health perspective for the study of a specific public health problem. Word extension: 2000 words. The paper must include the following.</p> <ol style="list-style-type: none"> 1. Description of the selected public health problem. 2. The relevance of addressing that problem for achieving social justice in health. 3. Traditional ways of studying that problem. 4. How to apply a political economy perspective into that problem. 5. Political advantages of dealing with that problem from a political economy perspective. <p>(Section of Syllabus: EVALUATION STRATEGIES)</p>
	DESS 8105- Social Theory and Public Health	<p><u>Final Paper on Theoretical Approach to Public Health Issue.</u> Students will write a paper on a public health issue or social determinant of health in which they evaluate the theoretical approaches used to define and address the issue and the implications it has for health equity. The paper must include the following:</p>

TABLE D4.1.i. Assessment of Competencies for DrPH Social Determinants of Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<ol style="list-style-type: none"> 1) Description of the public health/SDH issue or problem. 2) Description of a common approach to the problem in the public health peer reviewed literature. 3) Provide an example of this approach in public health practice through the analysis and critique of a technical report, policy document or intervention document as an example or case for analysis. 4) Discussion and evaluation of the approach based on the theories and critiques discussed in class. <p>Propose an alternative recommendation based on the goal of equity in health. (Section of Syllabus: EVALUATION STRATEGIES)</p>
	DESS 8305 Health and Social Policy Analysis	<p><u>Policy Paper:</u> Students will be required to produce a policy paper concerning a specific health issue analysis from a social determinant of health perspective and recommendations for action. Every student will present his or her work for group discussion. Further details of the writing of this paper and presentation will be provided and discussed the first meeting class. (Section of Syllabus: EVALUATION STRATEGIES)</p>
3. Apply community building and organization models and strategies for social determinants of health issues.	DESS 8206-Community Building and Action on the Social Determinants of Health	<p><u>Final Reflection Paper:</u> It is expected that students actively engage in a community context (e.g., interviewing leaders and members, participating in activities, contributing to tasks). This reflection should meet the following criteria: (Paper length: 7 approx.) TBD</p> <ol style="list-style-type: none"> 1. Including a theoretical grounded description of the experience (using references from the course). 2. A description of the connection of the community organization with the social determinants of health, and its impact or advocacy for social policies and/or programs. 3. Describing the activities in which the student was involved. 4. Using the SWOT analysis to identify the movement/ organization's strengths, challenges, assets, etc. 5. A reflection on how the organization's activities and the community organization and building principles and techniques used can have an impact on social determinants of health, policy, and programs. <p>(Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D4.1.i. Assessment of Competencies for DrPH Social Determinants of Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
Use research from diverse methodological approaches to disclose and address the impact of social determinants of health on the policy making process.	DESS 8201-Qualitative Methods in Social Determinants of Health	<p><u>Qualitative Research Proposal</u>: This is the final work of the course. Students will design an applied research proposal to address a relevant social determinant of health research question. Proposal will be written in: Arial, 1.5-line spacing, length 15 pages (excluding references and appendixes). Students must develop a research proposal considering public health discourses including the following:</p> <ol style="list-style-type: none"> 4. Specific aims (page 1) 5. Research strategy (Page 2-6) <ol style="list-style-type: none"> a. Significance b. Innovation c. Approach 6. Conceptual framework <ol style="list-style-type: none"> a. Studies 2. Methods: <ol style="list-style-type: none"> i. Participants ii. Instruments iii. Procedure iv. Analysis 3. References (Not included in the limit of pages) 4. Appendixes (Not included in the limit of pages) <p>(Section of Syllabus: EVALUATION STRATEGIES)</p>
	DESS 8202-Statistical Measurement and Argumentation in Social Determinants of Health	<p><u>Final Essay</u>: Students will write an essay that presents the evaluative argument that a specific statistical concept, method, or practice constitutes harms equity in health (broadly defined.) This argument can be, for example, that a poverty metric or ethnic classification is not appropriate for Puerto Rico. Students' evaluation will be based on a critical examination of the statistical concept's theoretical basis and its use in public health policy and practice. The paper must include the following.</p> <ol style="list-style-type: none"> 1. Description of the selected statistical concept, method, or practice. 2. Description of the relevance of such concept, method, or practice. 3. Explicit presentation of the claim, the evidence and the warrant (justification) of the argument. 4. Presentation of a conceptual visual model to facilitate any aspect of the argument. 5. Explanation of who benefits and who is harmed using such concept, method, or

TABLE D4.1.i. Assessment of Competencies for DrPH Social Determinants of Health		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		<p>practice.</p> <p>6. The paper must back the argument with required readings of the course. (Section of Syllabus: EVALUATION STRATEGIES)</p>
Formulate healthy public policies to promote the health and wellbeing of the population from an equity and social justice perspective.	DESS 8305 Health and Social Policy Analysis	<p><u>Policy Paper:</u> Students will be required to produce a policy paper concerning a specific health issue analysis from a social determinant of health perspective and recommendations for action. Every student will present his or her work for group discussion. Further details of the writing of this paper and presentation will be provided and discussed the first meeting class. (Section of Syllabus: EVALUATION STRATEGIES)</p>

- 2) **For degrees that allow students to tailor competencies at an individual level in consultation with an advisor, the school or program must present evidence, including policies and sample documents, that demonstrate that each student and advisor create a matrix in the format of Template D4-1 for the plan of study. Include a description of policies in the self-study document and at least five sample matrices in the electronic resource file.**

Not Applicable

- 3) **Include the most recent syllabus for each course listed in Template D4-1, or written guidelines for any required elements listed in Template D4-1 that do not have a syllabus. (electronic resource file)**

The required documentation can be found in **Electronic Resource File D4.3.1** (MPH Programs) and **D4.3.2** (DrPH Programs).

- 4) **If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

Strengths

- DrPH courses are taught by faculty from diverse specialties, academic background, and work experiences, many of whom still have extracurricular responsibilities dealing with emergent topics and needs in public health. These experiences contribute to courses that reflect an understanding of the challenges faced in the actual field and helps to build upon the knowledge and skills many DrPH students also bring to the program.
- All DrPH concentrations have established five competencies which are addressed in more than one course in the curriculum, providing students advanced training to meet the needs of the field. Competencies are achieved at progressively deeper levels throughout the curriculum.

Weaknesses

- The DrPH concentration competency-based curriculum and its assessment have not been fully implemented. Since the new DrPH curriculum was implemented for the first time for 2019-20 (SDH, HSAM) and 2020-21(EH) cohorts, some revised or new courses have not been offered.

Lessons Learned

- Since the school is implementing a new competency-based curriculum, it needs time and continuous evaluation to allow for further development and refinement of assessment strategies. The school is in the process of implementing the curriculum with the proposed assessment plan and, simultaneously, doing formative and summative evaluation of both processes.

D5. MPH APPLIED PRACTICE EXPERIENCE

MPH students demonstrate competency attainment through applied practice experiences. Applied practice experiences may be concentrated in time or may be spread throughout a student's enrollment. Opportunities may include the following: a practicum or internship completed during a summer or academic term, course-based activities (eg, performing a needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students), activities linked to service learning, as defined by the program, school or university, co-curricular activities (eg, service and volunteer opportunities, such as those organized by a student association), and/or a blend of for-credit and/or not-for-credit activities.

Applied practice experiences may involve governmental, non-governmental, non-profit, industrial, and for-profit settings or appropriate university-affiliated settings. To be appropriate for applied practice experience activities, university-affiliated settings must be primarily focused on community engagement, typically with external partners. University health promotion or wellness centers may also be appropriate. The school or program identifies sites in a manner that is sensitive to the needs of the agencies or organizations involved. Activities meeting the applied practice experience should be mutually beneficial to both the site and the student. The applied practice experiences allow each student to demonstrate attainment of at least five competencies, of which at least three must be foundational competencies (as defined in Criterion D2). The competencies need not be identical from student to student, but the applied experiences must be structured to ensure that all students complete experiences addressing at least five competencies, as specified above. The applied experiences may also address additional foundational or concentration-specific competencies, if appropriate. The school or program assesses each student's competency attainment in practical and applied settings through a portfolio approach, which demonstrates and allows assessment of competency attainment. It must include at least two products. Examples include written assignments, projects, videos, multi-media presentations, spreadsheets, websites, posters, photos, or other digital artifacts of learning. Materials may be produced and maintained (either by the school or program or by individual students) in any physical or electronic form chosen by the school or program. The materials may originate from multiple experiences (eg, applied community-based courses and service-learning courses throughout the curriculum) or a single, intensive experience (eg, an internship requiring a significant time commitment with one site). While students may complete experiences as individuals or as groups in a structured experience, each student must present documentation demonstrating individual competency attainment. Combined degree students have opportunities to integrate and apply their learning from both degree programs through applied practice experiences. The school or program structures applied practice experience requirements to support its mission and students' career goals, to the extent possible.

- 1) **Briefly describe how the school or program identifies competencies attained in applied practice experiences for each MPH student, including a description of any relevant policies. (self-study document)**

The applied practice experience is a requirement for all MPH students regardless of prior and/or current work experience. In the GSPH some competencies are pre-selected by programs for the applied practice experience and are declared in the program specialty practice syllabus. For example, CEPH's MPH competency number 19 "communicate audience-appropriate public health content" is pre-selected for all practice experiences. Each program has selected some competencies from the

core and concentration that are central to the program. For example, all MPH students in the Gerontology concentration must demonstrate the following competency: “Use of scientific knowledge, approaches, concepts, and models from the field of gerontology and the biological, psychological, and social science disciplines in the analysis of issues relevant to older adults”. However, student select 2 to 3 competencies based on the project or activities they are expected to perform as part of the practice experience (at least one MPH core and one concentration competency). Since the applied practice experience depends on the needs of the external organization where the practice experience takes place students are guided through the process of selection so they identify the competencies that need to be put into practice based on the project to be developed. Students receive an orientation before beginning both the integrative and practice experience. This orientation occurs at the beginning of their last term in the curriculum where they are tasked with completing a competency self-assessment. In the orientation students receive information about the project and/or activities they will be conducting as part of the applied practice experience. They also receive information about the organization for whom the project/activities will be performed to get an understanding of the utility and public health practice application of their project. At the end of this orientations students have a competency identification activity in which they identify the competencies from the curriculum that they need to put into practice in order to successfully complete the selected project and activities. These competencies are in addition to the ones pre-selected by the program. The applied practice faculty preceptor and/or program coordinators direct this activities with students and guide them through a discussion of the competencies and the identification and selection process.

Applied practice experience products vary based on the needs of the agency or organization for whom the student is doing the project. Some products are selected for students between the organization and faculty preceptors and students are guided as to the importance and utility of the products being worked on. In other cases students select products that can best respond to the needs of the organization with the guidance of faculty preceptors. This guided process between the student the organization and the faculty preceptor ensures that the products of the applied practice experience are useful to practice partners.

Applied practice products are assessed by the faculty preceptor through grading rubrics. These rubrics have some general evaluation criteria that are common to most projects and areas where evaluation criteria aligned with the competency being evaluated are added based on the products being developed.

- 2) **Provide documentation, including syllabi and handbooks, of the official requirements through which students complete the applied practice experience. (electronic resource file)**

Syllabi of applied practice experience are available in **Electronic Resource File D5.2**.

- 3) **Provide samples of practice-related materials for individual students from each concentration or generalist degree. The samples must also include materials from students completing combined degree programs, if applicable. The school or program must provide samples of complete sets of materials (ie, Template D5-1 and the work products/documents that**

demonstrate at least five competencies) from at least five students in the last three years for each concentration or generalist degree. If the school or program has not produced five students for which complete samples are available, note this and provide all available samples. (electronic resource file)

The new curriculum which incorporates CEPH's 2016 criteria was first implemented in AY 2019-2020. The students of programs such as the MPH with a concentration in Gerontology and the Public Health Education, have not had the new applied practice experience. Unfortunately, the MPH programs that were due to implement the first offering of the applied practice experience had to do so under covid pandemic restrictions, so this experience had to be adapted in these emergency conditions. Samples for these MPH programs practice experience in the new curriculum are available in **Electronic Resource File D5.3**.

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- Some competencies are selected by program and some by student, which allows students to tailor the learning to their needs
- Capacity of the School of Public Health to maintain alliances with community organizations.
- Graduated School of Public Health maintains an image that is respected by community leaders, they approach the school with identified needs that facilitate practice experience coordination.

Weaknesses

- It is difficult for student to preselect the competencies they want to achieve and be able to align them to the products as they prepare for the experience.
- Previous plans suffered abrupt changes due to the pandemic, however strategies were established to complete the Applied Practice Experience. As part of the process complicated scenario with the pandemics, the faculty worked with students individually so they could keep up with the assignments and requirements of the courses

Lessons Learned

- The school needs to adopt strategies that help guide students in understanding competency-based education to facilitate students alignment of competencies to their practice experiences.
- Practice experience designs must be flexible and capable of adapting to unforeseen events that may occur.

D6. DRPH APPLIED PRACTICE EXPERIENCE

Regardless of the amount or level of prior experience, all DrPH students engage in one or more applied practice experiences in which students are responsible for completion of at least one project that is meaningful for an organization and to advanced public health practice. The work product may be a single project or a set of related projects that demonstrate a depth of competence. It may be completed as a discrete experience (such as a practicum or internship) or integrated into program coursework. In either case, the deliverable must contain a reflective component that includes the student's expression of personal and/or professional reactions to the applied practice experience. This may take the form of a journal or other written product, a professional portfolio, or another deliverable as appropriate for the program. Relevant organizations may include governmental, non-governmental, non-profit, industrial, and for-profit settings. The school or program identifies sites in a manner that is sensitive to the needs of the agencies or organizations involved. Sites should benefit from students' experiences. The intention of this criterion is that the applied practice experience should take place within an organization external to the student's school or program so that it is not merely an academic exercise, but application of learning to a "real world" setting. The applied practice experience may be completed within a student's own work setting. DrPH programs ensure that graduates have significant advanced-level practical experiences collaborating with practitioners, allowing opportunities to develop leadership competencies and contribute to the field. The school or program identifies a minimum of five foundational and/or concentration-specific competencies (as defined in Criteria D3 and D4) that are reinforced and/or assessed through application. The school or program may either choose at least one competency from the leadership, management, and governance domain in Criterion D3 or choose a concentration specific competency identified in Criterion D4 if it relates to leadership skills. Competencies may differ from student to student.

1) Briefly describe how the school or program identifies competencies attained in applied practice experiences for each DrPH student, including a description of any relevant policies. (self-study document)

A DrPH applied practice experience consisting of a 200-hours field experience is required to all students, regardless of prior work experience. The DrPH applied practice experience offers doctoral students the opportunity to apply in a real world setting the theory, leadership, and problem-solving skills in an integrative manner. The applied practice experience project is designed so that the student has the principal responsibility, along with a team of collaborators in the site. Relevant organizations that could be Practicum sites include governmental, non-governmental, non-profit, industrial, and for-profit settings. The Practicum may be carried in or out-site Puerto Rico settings.

The applied practice experience contributes to the development of a minimum of five competencies, from which three are the same for all students (from the Leadership, Management, and Governance domain) and at least one must be a specialty-specific competency.

The three competencies to be addressed in every practice experience are:

5. Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies.

6. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems.

11. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency.

In addition, each student must address a minimum of two additional competencies, being at least one of them, a specialty-specific competency. (See Syllabus and Practice Manual)

DrPH applied practice experience project selection may vary. In most instances, students are encouraged to recommend practice sites and potential projects that are aligned with the dissertation topics. These are evaluated and approved by the program who assigns a faculty preceptor to help guide the student through the process in coordination with the community organization preceptor. In other instances the program may provide practice site alternatives to students through coordination with interested practice sites. DrPH projects are expected to result in a quality product that is useful to the organization. Among projects that DrPH students undertake are: analysis reports to guide issue identification, contextualization, and framing; stakeholder or community perceptions; evaluation or implementation criteria selection; or brief policy and program analysis or evaluations. The practice experience project competency assessment is assessed through the oral presentation and final product through grading rubrics.

2) Explain, with references to specific deliverables or other requirements, the manner through which the school or program ensures that the applied practice experience requires students to demonstrate leadership competencies. (self-study document)

Students' learning and achievement will be assessed through a variety of evaluation techniques. Specifically, leadership competencies are assessed using two assessment strategies: (1) a standard tool, the Leadership Practice Inventory (LPI) and (2) a reflective essay. The Leadership Practices Inventory is a questionnaire that contains 30 behavioral statements based on the Five Practices of Exemplary Leadership. Students, considered as leaders, and five to ten people that are related to them as supervisors and people supervised by them, rate themselves on the frequency with which they believe they engage in each of the 30 behaviors. They have a previous LPI completed during their first year. Results pre (1st year) and post (after applied practice experience) are compared to assess potential changes.

The other strategy to demonstrate leadership competencies is the reflective essay. Students must develop an essay about their personal and professional reactions to the Practicum and the lessons learned. They must elaborate on how has proven their leadership regarding a critical issue or concern of the Practicum site.

At the applied practicum experience, students are expected to present a project that is meaningful for the organization and to the advance of the public health practice with a reflective statement about their experience and lessons learned in the applied practice experience. In addition to the LPI and reflective essay, students must develop a final project that is meaningful for the organization and to the advance of the public health practice. It has two main components: (1) final product and (2) dissemination strategy.

Each Doctoral student develops a work plan and evaluates their practicum experience. This includes the work agenda, the Practicum project, evaluation and self-evaluation of performance and the site. Students' learning and achievement are assessed through a variety of evaluation techniques. Given the nature of the Practicum, emphasis will be placed on the student's performance in: a) synthesizing and integrating didactic knowledge and other learning experiences; b) applying theory and problem-

solving skills to professional public health practice in the field; and c) designing and implementing a project in the Practicum site. (See Syllabus and Practice Manual)

- 3) **Provide documentation, including syllabi and handbooks, of the official requirements through which students complete the applied practice experience. (electronic resource file)**

Applied practice syllabi and documentation is available in **Electronic Resource File D6.3.**

- 4) **Provide samples of practice-related materials for individual students from each concentration or generalist degree. The school or program must provide samples of complete sets of materials (ie, Template D6-1 and the work products/documents that demonstrate at least five competencies) from at least five students in the last three years for each concentration or generalist degree. If the school or program has not produced five students for which complete samples are available, note this and provide all available samples. (electronic resource file)**

The cohorts of the last three years following the new curriculum sequence have not reached the implementation of the applied practicum experience. However, we are including samples of practice-related materials from each concentration in **Electronic Resource File D6.4.** It is important to note that these practicums were not assessed in terms of the new CEPH competencies.

- 5) **If applicable, assess strengths and weaknesses related to this criterion and plans or improvement in this area. (self-study document)**

Strengths

- The DrPH programs have had required a doctoral-level practicum experience since their initiation. Previous practicum requirement allowed students to be exposed to different types of community practicums or field experiences according to the competencies sought by the degree program and guided by an academic and a field preceptor. These previous experiences will foster the implementation of the revised applied practicum to fulfill the new CEPH competencies.
- The assessment strategies include both, a standardized method (360 degrees) appraisal and a qualitative approach to measure leadership competencies. These assessments are required for all DrPH concentrations.

Weaknesses

- The applied practice experience from the new curriculum has not been offered since student cohorts that entered the school when they were implemented have not reached that point in the curriculum.

Lessons Learned

- The school is working in the transition to implement the DrPH applied practice experience addressing the new CEPH competencies and its assessment strategies. The faculty is enhancing their training related to assessment methods and resources to effectively evidence competencies achievement.

D7. MPH INTEGRATIVE LEARNING EXPERIENCE

MPH students complete an integrative learning experience (ILE) that demonstrates synthesis of foundational and concentration competencies. Students in consultation with faculty select foundational and concentration-specific competencies appropriate to the student's educational and professional goals. The ILE represents a culminating experience and may take many forms, such as a practice-based project, essay-based comprehensive exam, capstone course, integrative seminar, etc. Regardless of form, the student produces a high-quality written product that is appropriate for the student's educational and professional objectives. Written products might include the following: program evaluation report, training manual, policy statement, take-home comprehensive essay exam, legislative testimony with accompanying supporting research, etc. Ideally, the written product is developed and delivered in a manner that is useful to external stakeholders, such as non-profit or governmental organizations. Professional certification exams (eg, CPH, CHES/MCHES, REHS, RHIA) may serve as an element of the ILE but are not in and of themselves sufficient to satisfy this criterion. The ILE is completed at or near the end of the program of study (eg, in the final year or term). The experience may be group-based or individual. In group-based experiences, the school or program documents that the experience provides opportunities for individualized assessment of outcomes. The school or program identifies assessment methods that ensure that at least one faculty member reviews each student's performance in the ILE and ensures that the experience addresses the selected foundational and concentration-specific competencies. Faculty assessment may be supplemented with assessments from other qualified individuals (eg, preceptors).

- 1) List, in the format of Template D7-1, the integrative learning experience for each MPH concentration, generalist degree or combined degree option that includes the MPH. The template also requires the school or program to explain, for each experience, how it ensures that the experience demonstrates synthesis of competencies. (self-study document)**

In the GSPH some competencies are pre-selected by programs for the integrative learning experience and are declared in the program specialty practice syllabus. Each program has selected some competencies from the core and concentration that are central to the program which are declared in the syllabus. For example, all MPH students in the Epidemiology concentration must demonstrate the following competencies in quantitative data analysis which has related core and concentration competencies. However, student select 2 to 3 competencies based on the project or activities they are expected to perform as part of the integrative experience (at least one MPH core and one concentration competency). Since the project selected for the integrative experience may require the application of some competencies students are guided through the process of selection so they identify the competencies that need to be put into practice based on the project. In group projects the competencies are the same for all members of the group so the competency selection is done as a group facilitated by faculty project preceptors. Tables D7.1a. through D7.1f. provide more details on each program's integrative learning experience.

TABLE D7.1.a. MPH Integrative Learning Experience for General Option Concentration	
Integrative learning experience (list all options)	How competencies are synthesized
SALP 6997: Integrative Learning Experience in General Public Health	Students are divided into groups to conduct an applied research project for a community organization's identified need. At the beginning of the course students identify the competencies that are aligned with the applied research project to be conducted. Students identify the public health problem (this problem came from a community concern, which is previously identified). Students conduct literature to write an introduction, justification, purpose of the study, objectives, hypothesis (when necessary) and identify theoretical framework for the study. Write a methods sections describing study design, population, sample, recruitment, instruments, and statistical analysis to be address. Students implements the project interpret results and discuss findings and provide recommendation based on the implication of these results in issues regarding Public Health. The final product is a Technical Report with a chapter on each of the above-mentioned processes. The final product is evaluated with a grading rubric that incorporates identified competencies. Students are evaluated based on their individual contributions to the project through peer-assessment and faculty assessment. The final product is evaluated as a group product.

TABLE D7.1.b. MPH Integrative Learning Experience for Epidemiology Concentration	
Integrative learning experience (list all options)	How competencies are synthesized
SALP 6999: Capstone Project in Public Health: Epidemiology and Biostatistics	Students from the Epidemiology and Biostatistics concentrations are combined in one group to conduct an applied research epidemiological research project for a community organization's identified need. At the beginning of the course students identify the competencies that are aligned with the applied research project to be conducted. The final product consists of five written chapters: (1) Introduction (research problem, magnitude of the problem, and justification, (2) Literature review (theoretical framework, etiology of the health problem, risk and protective factors, prevention, and control measures), (3) Methods (objectives, study design, population and sample selection, data collection plan, data processing and analysis plan), (4) Results, and (5) Conclusions (discussion, recommendations, strengths and weaknesses. The recommendations should include concrete interventions or issues regarding public policy to address the health problem based on the research findings. The final product is evaluated with a grading rubric that incorporates identified competencies. Students are evaluated based on their individual contributions to the project through peer-assessment and faculty assessment. The final product is evaluated as a group product.

TABLE D7.1.c. MPH Integrative Learning Experience for Biostatistics Concentration	
Integrative learning experience (list all options)	How competencies are synthesized
SALP 6999: Capstone Project in Public Health: Epidemiology and Biostatistics	Students from the Epidemiology and Biostatistics concentrations are combined in one group to conduct an applied research epidemiological research project for a community organization's identified need. At the beginning of the course students identify the competencies that are aligned with the applied research project to be conducted. The final product consists of five written chapters: (1) Introduction (research problem, magnitude of the problem, and justification, (2) Literature review (theoretical framework, etiology of the health problem, risk and protective factors, prevention, and control measures), (3) Methods (objectives, study design, population and sample selection, data collection plan, data processing and analysis plan), (4) Results, and (5) Conclusions (discussion, recommendations, strengths and weaknesses. The recommendations should include concrete interventions or issues regarding public policy to address the health problem based on the research findings. The final product is evaluated with a grading rubric that incorporates identified competencies. Students are evaluated based on their individual contributions to the project through peer-assessment and faculty assessment. The final product is evaluated as a group product.

TABLE D7.1.d. MPH Integrative Learning Experience for Environmental Health Concentration	
Integrative learning experience (list all options)	How competencies are synthesized
SAAM 6999: Capstone Project in Public Health: Environmental Health	Students are divided into groups to conduct an applied research project in environmental health for a community organization's identified need. At the beginning of the course students identify the competencies that are aligned with the applied research project to be conducted. The final product consists of five written chapters: (1) Introduction (research problem, magnitude of the problem, and justification, (2) Literature review (theoretical framework, etiology of the health problem, risk and protective factors, prevention, and control measures), (3) Methods (objectives, study design, population and sample selection, data collection plan, data processing and analysis plan), (4) Results, and (5) Conclusions (discussion, recommendations, strengths, and weaknesses. The recommendations should include concrete interventions or issues regarding public policy to address the health problem based on the research findings. The final product is evaluated with a grading rubric that incorporates identified competencies. Students are evaluated based on their individual contributions to the project through peer-assessment and faculty assessment. The final product is evaluated as a group product.

TABLE D7.1.e. MPH Integrative Learning Experience for Gerontology Concentration	
Integrative learning experience (list all options)	How competencies are synthesized
<p>GERO 6997: Integrative Experience in Public Health: Gerontology</p>	<p>Students are divided into groups to conduct an applied public health project for a community organization's identified need. At the beginning of the course students identify the competencies that are aligned with the project to be conducted. The final project can be applied research, policy or program evaluation, or a needs assessment that can guide further action in addressing a public health issue in the older adult population. The results of the designed and implemented project will be presented in a technical report that addresses the issue identified with literature review, the methods or analysis undertaken, results from the analysis and recommendations for further action. The final product is evaluated with a grading rubric that incorporates identified competencies. Students are evaluated based on their individual contributions to the project through peer-assessment and faculty assessment. The final product is evaluated as a group product.</p>

TABLE D7.1.f. Integrative Learning Experience for Master of Public Health Education Concentration	
Integrative learning experience (list all options)	How competencies are synthesized
<p>EDSA 6997 Integrative Experience in Health Promotion and Health Education</p>	<p>Students are divided into small groups to conduct an applied public health project for a community organization's identified need. At the beginning of the course students identify the competencies that are aligned with the project to be conducted. Student projects can be policy evaluation, program or intervention evaluation, applied research, health promotion or education activity design. The final products can be concept papers, white papers, journal article manuscript, evaluation report, or instructional/education module, among others, based on the project. The final product is evaluated with a grading rubric that incorporates identified competencies. Students are evaluated based on their individual contributions to the project through peer-assessment and faculty assessment. The final product is evaluated as a group product.</p>

2) Briefly summarize the process, expectations, and assessment for each integrative learning experience. (self-study document)

The integrative learning experiences of all MPH program concentrations are structured experiences within an assigned course. Although there are variations in the expectations and products, the school established guidelines during curriculum design and implementation to ensure that all integrative experience courses provide comparable experiences in the process, expectations, and assessment processes.

All integrative experiences are planned prior to the beginning of the course. The planning and discussion of potential projects with students can occur in a prior course. For example, the MPH-Gerontology program has an integrative experience planning course prior to the experience. Other programs which have a defined applied research experiences begin the process in the “SALP 6250 Applied Public Health Research Methods” course where the proposal for the experience is developed.

Prior to all integrative learning experiences students conduct a competency self-assessment and identify the competencies that they will have to apply in the project selected. The project can be pre-selected by the faculty member coordinating the course among community organization petitions received by the program or can be developed along with students. Once a project is selected students, supervised by faculty, create an action plan or proposal to be implemented and executed during the integrative experience course.

The expectation is that the project will yield a high-quality product that will be useful to the community and that meets the needs identified. All MPH programs’ integrative experience course in the GSPH are group projects. However, all courses contain individual and group assessment methods that allow for the assessment of competencies and the quality of the final product.

- 3) **Provide documentation, including syllabi and/or handbooks, that communicates integrative learning experience policies and procedures to students. (electronic resource file)**

Syllabi and accompanying documentation can be found in **Electronic Resource File D7.3**.

- 4) **Provide documentation, including rubrics or guidelines, that explains the methods through which faculty and/or other qualified individuals assess the integrative learning experience with regard to students’ demonstration of the selected competencies. (electronic resource file)**

Accompanying documentation can be found in **Electronic Resource File D7.3**

- 5) **Include completed, graded samples of deliverables associated with each integrative learning experience option from different concentrations, if applicable. The school or program must provide at least 10% of the number produced in the last three years or five examples, whichever is greater. (electronic resource file)**

Some cohorts of the last three years following the new curriculum sequence have not reached the implementation of the applied practicum experience. However, we are including samples of practice-related materials from each concentration in **Electronic Resource File D7.5**. It is important to note that these practicums were not assessed in terms of the new CEPH competencies.

- 6) **If applicable, assess strengths and weaknesses related to this criterion and plans or improvement in this area. (self-study document)**

Strengths

- GSPH diverse faculty networks facilitate real world integrative public health practice experiences.
- Integrative learning experiences are designed in ways that allow students to apply concepts and skills learned throughout the curriculum.

Weaknesses

- Implementation process was affected by covid restrictions in the first year of implementation of the revised curriculum.
- Students present difficulties identifying competencies for their projects.

Lessons Learned

- Need for flexibility in integrative learning experiences. These experiences take time to plan and can be affected by external events.

D8. DRPH INTEGRATIVE LEARNING EXPERIENCE

As part of an integrative learning experience, DrPH candidates generate field-based products consistent with advanced practice designed to influence programs, policies or systems addressing public health. The products demonstrate synthesis of foundational and concentration specific competencies. The integrative learning experience is completed at or near the end of the program of study. It may take many forms consistent with advanced, doctoral-level studies and university policies but must require, at a minimum, production of a high-quality written product.

- 1) List, in the format of Template D8-1, the integrative learning experience for each DrPH concentration or generalist degree. The template also requires the school or program to explain, for each experience, how it ensures that the experience demonstrates synthesis of competencies. (self-study document)

TABLE D8.1.a. DrPH Integrative Learning Experience for Environmental Health Concentration	
Integrative learning experience (list all options)	How competencies are synthesized
Doctoral Dissertation	<p>DrPH students from the EH specialty demonstrate mastery in foundational and specialty competencies in the design and implementation of a research project that represents a theoretical and methodological contribution to public health practice in the environmental health area. Dissertations may take a variety of forms and must generate a high-quality written product consistent with advanced practice designed to influence programs, policies or systems addressing environmental public health. Students work under the guidance of the Doctoral Dissertation Committee. The Doctoral Dissertation Committee ensures the final product of the dissertation addresses a significant practice challenge in the field and that a high-quality written product consistent with advanced practice in environmental public health area is generated.</p> <p>Students must address a minimum of five competencies in their dissertation, from which two are the same for all students (one foundational and one from the specialty). According to the research objectives, students with their Doctoral Dissertation Committee determine what other competencies are more appropriate to be fulfilled (at least two must be specialty-specific competencies).</p> <p>The two competencies that are required for every EH student are:</p> <p>Foundational Competency:</p> <p>2. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue.</p> <p>Environmental Health Specialty Competency:</p> <p>5. Integrate evidence-based research on environmental health to advance programs, policies, or systems promoting population health and well-being.</p>

TABLE D8.1.b. DrPH Integrative Learning Experience for Health Systems Analysis and Management Concentration	
Integrative learning experience (list all options)	How competencies are synthesized
<p>Dissertation in Health Systems Analysis and Management</p> <ul style="list-style-type: none"> • Proposal • Dissertation 	<p>In this Integrative Learning Experience, student must demonstrate mastery in foundational and specialty competencies to generate a product designed to influence public health practice, programs, policies, or systems. This Integrative Learning Experience (ILE) contributes to the development of a minimum of five competencies: two competencies apply for all students (one foundational and one from the concentration).</p> <p>Required Foundational Competency:</p> <p>2. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue.</p> <p>Required Health Systems Analysis and Management Concentration Competency:</p> <p>4. Demonstrates proficiency in the application of quantitative and qualitative methods for health system decision making.</p> <p>In addition, students will select three more competencies; at least two must be specialty-specific competencies, as required for CEPH accreditation.</p> <p>Students must design and implement a research project that represents a theoretical and methodological contribution to influence public health practice, programs, policies, or systems in the specialty area. Students will work under the guidance of the Doctoral Dissertation Committee composed of faculty members and experienced professionals capable of judging the student's competence in the major area of emphasis. (See Syllabus and Dissertation Manual).</p>

TABLE D8.1.c. DrPH Integrative Learning Experience for Social Determinants of Health Concentration	
Integrative learning experience (list all options)	How competencies are synthesized
Doctoral dissertation	<p>DrPH students from the SDH specialty will demonstrate mastery in foundational and specialty competencies in the design and implementation of a research project that represents a theoretical and methodological contribution to the social determinants of health and public health area. The dissertation will embody a praxis directed to problem solving in a specific social determinant area and its relation to the health of a specific population, specific health outcomes or social policy. The DrPH dissertation project on SDH may take a variety of forms including but not limited to: program evaluation, policy analysis, develop a new public health intervention, design and implementation of a public health project, develop a legislative proposal, or a research with implications for the social determinants of health perspective. All the students will work under the guidance of the Doctoral Dissertation Committee. With the approval of the Doctoral Committee, the student will select the traditional dissertation format or the three-articles dissertation format. Both options are described in the DrPH Social Determinants of Health Dissertation Manual. The topic should advance the practice of public health within the social determinants of health perspective. The dissertation product must demonstrate the student's mastery in areas of public health leadership, the social determinants of health framework, the application of state-of-the-art knowledge, and approaches to address broadly defined public health problems and the integration of the diversity of competences promoted by the Doctoral Program's curriculum. The completed dissertation must display proficiency in theory-based research and analytic skills.</p> <p>The doctoral dissertation should (1) reveal the student's ability to analyze, interpret, and synthesize information; (2) demonstrate the student's knowledge of the literature relating to the project and acknowledge prior scholarship on which the dissertation is built; (3) describe the methods and procedures used; (4) present results in a sequential and logical manner; (5) display the student's ability to discuss fully and coherently the meaning of the results, (6) demonstrate their ability to translate knowledge to practical public health applications and (7) construct a diversity of persuasive arguments (including quantitative arguments). The three-articles option dissertation must be presented in a format such that its chapters could be submitted to a peer-reviewed journal in public health or the social sciences. At the end of the course students are expected to present the results of their research in writing and orally.</p>

TABLE D8.1.c. DrPH Integrative Learning Experience for Social Determinants of Health Concentration	
Integrative learning experience (list all options)	How competencies are synthesized
	<p>This Integrative Learning Experience (ILE) contributes to the development of a minimum of five competencies.</p> <p>Foundational Competency required to all students:</p> <p>2. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue.</p> <p>Social Determinants of Health Specialty Competency:</p> <p>In addition, students will select 4 more competencies: at least two must be specialty-specific competencies, such as:</p> <ol style="list-style-type: none"> 1. Evaluate emergent public health problems and policies to advance health equity through the theoretical and critical examination of public health discourses and historical practices. 2. Apply social theories, political economy and intersectoral analysis to address public health issues in diverse scenarios. 3. Integrate knowledge of community organizing in the design, implementation, or evaluation of health and social policies and programs. 4. Use research from diverse methodological approaches to disclose and address the impact of social determinants of health on the policy making process. 5. Formulate healthy public policies to promote the health and wellbeing of the population from an equity and social justice perspective.

2) **Briefly summarize the process, expectations, and assessment for each integrative learning experience. (self-study document)**

All DrPH students follow similar processes in completing their integrative learning experience:

DrPH Dissertation

The Integrative Learning Experience is organized through two courses: Dissertation Proposal and Dissertation. Under the guidance of their Doctoral Dissertation Committee, DrPH candidates develop a dissertation project demonstrating their ability to synthesize competencies in the analysis and mastery in foundational and concentration competencies by designing and implementing a research project that represents a theoretical and methodological contribution to influence public health practice, programs, policies, or systems in the concentration area. The dissertation can be based on program evaluation, policy analysis, development of an intervention, design, and implementation of a public health program, development of a legislative proposal, or a traditional research dissertation from a public health perspective. The dissertation must make a substantial contribution to the existing public health practice knowledge base.

DrPH Dissertation Format and Procedures:

1. **Responsible Conduct of Research Training:** All SPH doctoral degree candidates must complete the training and certification of advanced responsible conduct of research training prior to engage in the implementation of the dissertation project.
2. **Formation of Dissertation Doctoral Committee:** Students identify a dissertation advisor and work with that individual to form a Doctoral Dissertation Committee. The student will submit to the Program Coordinator and to the Department Chair a written request using the Dissertation Committee Nomination Form during the academic trimester registering in the Doctoral Dissertation Proposal course. The committee will consist of three or more faculty members, at least one of whom must be a senior member of the DrPH concentration Department. The specific membership requirements vary according the DrPH concentration.
3. **Dissertation Proposal Development:** Students work independently guided by their Dissertation Preceptor and Committee designing a research proposal that represents a theoretical and methodological contribution to public health as it relates to their concentration area. Students must present in writing and orally (public defense) the problem, research questions, literature review, and study's research methods as a proposal for approval of the Dissertation Committee. The dissertation proposal must be approved by all members of the student's Dissertation Committee prior to start working on the dissertation and as a prerequisite for the student enrollment in the doctoral dissertation course. The dissertation committee evaluates the presentation in private and informs the student by filling the appropriate form, if the proposal was approved; a copy of the proposal and the proposal approval form is sent and filed by the Program Coordinator's (see Manual).
4. **Dissertation Progress:** Once the student receives approval from the Institutional Review Board (IRB) regarding permits for gathering information and conducting research, students will enroll in the Doctoral Dissertation course. Students will proceed to carry out his/her project according to the research plan described in the dissertation proposal and under the guidance of the Dissertation Committee. The student is responsible to meet regularly with his/her Committee Chair and other Committee members during the development of the dissertation proposal process, keep them informed about its progress and keep a record of matters discussed and agreements reached during the meetings (See Manual).
5. **Dissertation Defense:** The implementation of the dissertation research project is part of the course titled Doctoral Dissertation in the specialty (ADSS 8401, SAAM 8199, DESS 8199). At the end of the course, students are expected to complete their dissertation in writing and present it orally. The preparation of the dissertation involves the implementation of a research project, revision of Chapters I, II and III and the development of Chapters IV and V, when using the traditional dissertation format, and the manuscripts and related documents when using the manuscript-format option. The Dissertation Committee must certify that the dissertation document is complete and ready to be defended before its submission for Dissertation Oral Defense that involves an invitation to the academic community (faculty, students, and administrators). The student will submit a complete copy of the dissertation to each member of his/her Dissertation Committee at least two-weeks in advance of the oral defense. The defense of the doctoral dissertation is a formal oral examination administered and evaluated by the Dissertation Committee. This requirement, to be conducted in an appropriate public forum, is

designed to demonstrate students' ability to present the integration and application of public health practice scholarship and skills required to solve complex public health problems. The oral defense outcomes report will indicate the nature and extent of the corrections required by the Committee as a condition for final approval of a doctoral dissertation. The Doctoral Dissertation Committee Chair will ensure that the doctoral dissertation defense outcomes' report is completed in all its parts and delivered to Doctoral Program Coordinator office and to the Associate Dean's Office. The dissertation will be signed when the Doctoral Dissertation Committee agrees that is corrected in all its parts.

6. **DrPH Dissertation Assessment and Approval** - The Doctoral Dissertation Committee, in consultation with the DrPH program coordinator, will then make the final determination and certify the student's successful fulfillment of all DrPH program requirements. Students must submit a copy of the completed dissertation and an abstract of no more than 350 words to the DrPH program Coordinator and the Library as part of the graduation recommendation process. The DrPH Program coordinator submit the recommendation to confer the degree with the required documentation to the Academic Associate Dean's Office. The dissertation committee is composed of faculty from the school and invited experts in the field or topic most relevant to the dissertation project. In the analysis of the process and end product the dissertation committee use their expertise in providing continuous feedback during the process and in the final assessment. Competency rubrics have been added to the new curriculum to better assess student competency attainment.
- 3) **Provide documentation, including syllabi and/or handbooks, that communicates integrative learning experience policies and procedures to students. (electronic resource file)**

Syllabi and accompanying documentation can be found in **Electronic Resource File D8.3**.

- 4) **Provide documentation, including rubrics or guidelines, that explains the methods through which faculty and/or other qualified individuals assess the integrative learning experience with regard to students' demonstration of the selected competencies. (electronic resource file)**

Accompanying documentation can be found on Syllabus appendixes and dissertation manuals for each course and can be found in **Electronic Resource File D8.3**.

- 5) **Include completed, graded samples of deliverables associated with each integrative learning experience option from different concentrations. The school or program must provide at least 10% of the number produced in the last three years or five examples, whichever is greater. If the school or program does not have five recent samples for an option, note this and provide all available samples. (electronic resource file)**

The Dissertation process ensures that dissertations are field-based products consistent with advanced practice designed to influence programs, policies or systems addressing public health. The process begins with dissertation manuals that provide clear expectations about expected dissertation projects and the characteristics they must adhere to. During the process of dissertation topic selection the dissertation advisor guides students to assure that these guidelines and expectations are adhered to. This is further validated by the dissertation committee in both proposal and final dissertation defense and approval. Program coordinators and department chairs also review dissertation committee recommendations for both the proposal and final dissertation. These documents are also sent to the Associate Dean of Academic Affairs for review to ensure that all requirements have been completed.

The cohorts of the last three years following the new curriculum sequence have not reached the implementation of the Integrative Learning Experience. However, we are including samples of Integrative Learning Experience from each concentration in **Electronic Resource File D8.5**. It is important to note that these ILES were not assessed in terms of the new CEPH competencies. Students in the new curriculum finish course-work and take the doctoral exam on academic year 2022-23 and are expected to enroll in dissertation courses beginning in 2023-24.

6) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The Doctoral Dissertation has been a required Integrative Learning Experience since the implementation of all DrPH programs. Students have been able to demonstrate their competencies in designing and performing diverse projects, such as, program evaluations, policy analysis, development of an intervention, design, and implementation of a public health program, development of a legislative proposal, or a traditional research dissertation from a public health perspective. They have been able to address emerging and relevant public health issues to fulfill the needs of our communities, organizations, and population. These previous experiences will foster the implementation of the revised format of the Integrative Learning Experience meeting the new CEPH competencies.
- The School of Public Health and the DrPH programs include faculty from diverse specialties, academic background, research interests, and work experiences that support the development of DrPH students' dissertation projects yielding significant contributions to the public health field.

Weaknesses

- The Integrative Learning Experience has not been offered to address the new CEPH competency model.

Lessons Learned

- The Integrative Learning Experience from the new curriculum sequence will not be implemented yet for two more years. However, the school is working in the transition to implement the DrPH Integrative Learning Experience adopting the new CEPH competencies and its assessment strategies.

D9. PUBLIC HEALTH BACHELOR'S DEGREE GENERAL CURRICULUM

NOT APPLICABLE

**D10. PUBLIC HEALTH BACHELOR'S DEGREE FOUNDATIONAL
DOMAINS**

NOT APPLICABLE

**D11. PUBLIC HEALTH BACHELOR'S DEGREE FOUNDATIONAL
COMPETENCIES**

NOT APPLICABLE

**D12. PUBLIC HEALTH BACHELOR'S DEGREE CUMULATIVE AND
EXPERIENTIAL ACTIVITIES**

NOT APPLICABLE

**D13. PUBLIC HEALTH BACHELOR'S DEGREE CROSS-CUTTING
CONCEPTS AND EXPERIENCES**

NOT APPLICABLE

D14. MPH PROGRAM LENGTH

An MPH degree requires at least 42 semester-credits, 56 quarter-credits or the equivalent for completion.

- 1) Provide information about the minimum credit-hour requirements for all MPH degree options. If the university uses a unit of academic credit or an academic term different from the standard semester or quarter, explain the difference and present an equivalency in table or narrative form. (self-study document)

TABLE D14.1.a MPH Program Minimum Credit-Hour Requirements						
Content	Program					
	Biostatistics	Epidemiology	General Option	Health Education	Environmental Health	Gerontology
Core knowledge courses	31 credits	31 credits	31 credits	31 credits	31 credits	31 credits
Specialty	19 credits	17 credits	15 credits	21 credits	15 credits	18 credits
Electives	0 credits	0 credits	3 credits	6 credits	3 credits	3 credits
Interprofessional experience	12 hours	12 hours	12 hours	12 hours	12 hours	12 hours
Practice experience	1 credit	1 credit	1 credit	3 credit	2 credit	1 credit
Integrative learning experience	5 credits	5 credits	5 credits	3 credits	3 credits	5 credits
Total Credits	56	54	55	64	54	58
Length	1 year	1 year	1 year	2 years	1 year	2.5 years

- 2) Define a credit with regard to classroom/contact hours. (self-study document)

The School schedule is based on trimesters. The quantitative measure assigns 3 credits to 36 contact hours (1 weekly hour = 1 credit). However, some courses with a laboratory, skills, or applied practice component may have an equivalency of one credit to three contact hours (see **Table D14.2.a.**) As part of the UPR institutional policy for syllabi, the relation between credits and contact hours is declared in each syllabus.

TABLE D14.2.a. Credit to Contact Hours Equivalency	
Credits	Contact hours per trimester
1	12
2	24
3	36
4	48
5	60

The GSPH academic year is divided in 12-week trimesters. The UPR system policy defines a trimester credit-hour as 12 contact hours per academic term of 12 weeks. The summer session complies with this policy. The duration of a trimester session in Puerto Rico is 12 weeks. **Table D14.2.b.** was submitted to CEPH in 2007 to show the GSPH compliance with program length.

TABLE D14.2.b. Calendar Term Equivalencies ¹					
Calendar Term	Credits	Weeks/Credits	Years	Total Weeks of Study	Credits/weeks ²
Semester	42	15	2	60	0.7
Quarter	56	10	2	80	0.7
Trimester	54	12	1	48	1.12
¹ This analysis was included in the December 2007 <i>Compliance Report</i> requested by the CEPH. The Board expressed the GSPH complied with regard to the criterion on program length on February 29, 2008 ² Equivalency formula= number of credits/total weeks of study					

D15. DRPH PROGRAM LENGTH

The DrPH degree requires a minimum of 36 semester-credits of post-master's coursework or its equivalent. Credits associated with the integrative learning experience and, if applicable, a residency, internship or other applied practice experience conducted outside of a didactic course, do not count toward this requirement. The minimum credit requirement also does not count MPH level prerequisite courses or their equivalent.

- 1) Provide information about the minimum credit-hour requirements for all DrPH degree options. If the university uses a unit of academic credit or an academic term different from the standard semester or quarter, explain the difference and present an equivalency in table or narrative form. (self-study document)**

The minimum credit requirement for the DrPH varies according to the concentration as shown in the **Table D15.1.**

TABLE D15.1.a. DrPH Program Minimum Credit-Hour Requirements	
Program	Minimum credit-hour requirement
Environmental Health	55 + 200 hours
Health Systems Analysis and Management	57 + 200 hours
Social Determinants of Health	57 + 200 hours

- 2) Define a credit with regard to classroom/contact hours. (self-study document)**

The school schedule is based on trimesters. The quantitative measure assigns 3 credits to 36 contact hours (1 weekly hour = 1 credit). However, some courses with a laboratory, skills, or applied practice component may have an equivalency of one credit to three contact hours. As part of the UPR institutional policy for syllabi, the relation between credits and contact hours is declared in each syllabus. Refer to **Criterion D14 - Tables D14.2.a. and D14.2.b.** for more information on credit to classroom contact hour equivalencies.

D16. BACHELOR'S DEGREE PROGRAM LENGTH

NOT APPLICABLE

D17. ACADEMIC PUBLIC HEALTH MASTER'S DEGREES

Students enrolled in the unit of accreditation's academic public health master's degrees (eg, MS in biostatistics) complete a curriculum that is based on defined competencies; produce an appropriately rigorous discovery-based paper or project at or near the end of the program of study; and have the opportunity to engage in research at a level appropriate to the degree program's objectives. These students also complete coursework and other experiences, outside of the major paper or project, that substantively address scientific and analytic approaches to discovery and translation of public health knowledge in the context of a population health framework. Finally, student's complete coursework that provides instruction in the foundational public health knowledge at an appropriate level of complexity. This instruction may be delivered through online, in-person or blended methodologies, but it must meet the following requirements while covering the defined content areas.

1) List the curricular requirements for each relevant degree in the unit of accreditation. (self-study document)

The Master of Science (MS) with a Specialty in Epidemiology is an academic degree that consists of 76 credits distributed in six academic quarters and one summer. The training of epidemiologists covers all levels and areas of epidemiological research, and the diagnosis and evaluation of health situations in any region or area considered. Students take the courses in the following areas: 28 credits in epidemiology, 19 credits in biostatistics, 3 credits in environmental health, 4 credits in social and behavioral sciences, and 3 credits in public health. The program also includes an additional three courses (10 credits) for the research project and 9 credits in electives (refer to **Table D17.1**). Most courses are only offered once in the school year, and some are requirements of courses taken later in the year, so students need to take courses in a specific order. The culminating experience for the MS is a written research project or thesis approved by their thesis committee, which includes at least two faculty preceptors: an epidemiologist and a biostatistician.

TABLE D17.1.a MS-Epidemiology Curriculum	
CURRICULUM	Credits
<i>Public Health CORE</i>	
SALP 6006 Introduction to Public Health	3
SAAM 6528 Principles of Environmental Public Health	3
BIOE 6525 Statistical Analysis	5
EPID 6523 Epidemiological Methodology	4
<i>SPECIALTY</i>	
EPID 6528 Epidemiology of Mental Disorders	3
EPID 6529 Epidemiology of Chronic Diseases	3
EPID 6535 Epidemiology of Infectious Diseases	4
EPID 6527 Public Health Surveillance	2
BIOE 6605 Statistical Computing Applied to Public Health	4
DEMO 6546 Mortality	4
EPID 6539 Epidemiological Aspects of Public Health Practice	2
BIOE 6535 Statistical Inference	4

TABLE D17.1.a MS-Epidemiology Curriculum	
CURRICULUM	Credits
BIOE 6545 Introduction to Sampling Theory	3
BIOE 6555 Regression and Correlation Analysis	3
EPID 6549 Advanced Research Methods in Epidemiology	5
EPID 6552 Epidemiology Seminar I	1
EPID 6553 Epidemiology Seminar II	1
EPID 6554 Epidemiology Seminar III	1
EPID 6555 Epidemiology Seminar IV	1
EPID 6556 Epidemiology Seminar V	1
EPID 6561 Epidemiological Research I	4
EPID 6562 Epidemiological Research II	4
EPID 6563 Epidemiological Research III	2
ELECTIVES	
Electives	9
TOTAL	76

TABLE D19.2.d. Master of Science in Industrial Hygiene Curriculum	
CURRICULUM	Credits
CORE PUBLIC HEALTH COURSES	
SALP 6006 Introduction to Public Health	3
BIOE 6525 Statistical Analysis	5
EPID 6523 Epidemiological Methodology	4
SAAM 6528 Principles of Environmental Public Health	3
SPECIALTY	
ADSS 6518 Organizational and Administrative Aspects of Occupational Health & Industrial Hygiene Programs	3
SAAM 6512 Physical Hazards Control	3
SAAM 6513 Physical Hazards Laboratory	1
SAAM 6524 Occupational Health Principles	3
SAAM 6526 Principles of Industrial Ergonomics	3
SAAM 6543 Industrial Hygiene	3
SAAM 6547 Basic Principles in Occupational Safety	3
SAAM 6548 Industrial Hygiene Laboratory	2
SAAM 6565 Chemical Risk Management	3
SAAM 6567 Management Tools for Industrial Hygienists	3
SAAM 6568 Laws and Regulations Applied to Occupational Safety	3
SAAM 6570 Response and Preparation for Emergencies and Hazardous Operations	3
SAAM 6571 Research Topics in Occupational Epidemiology and Health	3

TABLE D19.2.d. Master of Science in Industrial Hygiene Curriculum	
CURRICULUM	Credits
SAAM 6572 Design of Controls in Ergonomics	3
SAAM 6573 Chemical Risk Laboratory	1
SAAM 6636 Occupational Toxicology	3
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
SAAM 6566 Field Study of Occupational Environments	2
SAAM 6696 Industrial Hygiene Internship	6
TOTAL	66

- 2) Provide a matrix, in the format of Template D17-1, that indicates the required assessment opportunities for each of the defined foundational public health learning objectives (1-12). Typically, the school or program will present a separate matrix for each degree program, but matrices may be combined if requirements are identical. (self-study document)

Students in Academic Masters Degrees are expected to attain knowledge and competencies in the basic public health content areas. This is accomplished by a variety of educational strategies, the most important of these being the SALP 6006-Introduction to Public Health course. SALP 6006 is a 3-credit required multi- and interdisciplinary-course covering the breadth of public health which all students complete at the beginning of their first year at the GSPH.

TABLE D17.2.a Assessment of Foundational Public Health Knowledge for Academic Public Health Master's Degree		
Content	Course number(s) and name(s)	Describe specific assessment opportunity"
Explain public health history, philosophy and values	SALP 6006 Introduction to Public Health	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam. (Section of Syllabus: EVALUATION STRATEGIES)
Identify the core functions of public health and the 10 Essential Services*	SALP 6006 Introduction to Public Health	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam. (Section of Syllabus: EVALUATION STRATEGIES)
Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	SALP 6006 Introduction to Public Health	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D17.2.a Assessment of Foundational Public Health Knowledge for Academic Public Health Master's Degree		
Content	Course number(s) and name(s)	Describe specific assessment opportunity"
List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	SALP 6006 Introduction to Public Health	<p><u>Public Health Case Study Analysis:</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)</p>

**TABLE D17.2.a Assessment of Foundational Public Health Knowledge for Academic
Public Health Master's Degree**

Content	Course number(s) and name(s)	Describe specific assessment opportunity"
Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	SALP 6006 Introduction to Public Health	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)

**TABLE D17.2.a Assessment of Foundational Public Health Knowledge for Academic
Public Health Master's Degree**

Content	Course number(s) and name(s)	Describe specific assessment opportunity"
<p align="center">Explain the critical importance of evidence in advancing public health knowledge</p>	<p align="center">SALP 6006 Introduction to Public Health</p>	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)</p>

**TABLE D17.2.a Assessment of Foundational Public Health Knowledge for Academic
Public Health Master's Degree**

Content	Course number(s) and name(s)	Describe specific assessment opportunity"
Explain effects of environmental factors on a population's health	SALP 6006 Introduction to Public Health	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D17.2.a Assessment of Foundational Public Health Knowledge for Academic Public Health Master's Degree		
Content	Course number(s) and name(s)	Describe specific assessment opportunity"
Explain biological and genetic factors that affect a population's health	SALP 6006 Introduction to Public Health	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)

**TABLE D17.2.a Assessment of Foundational Public Health Knowledge for Academic
Public Health Master's Degree**

Content	Course number(s) and name(s)	Describe specific assessment opportunity"
Explain behavioral and psychological factors that affect a population's health	SALP 6006 Introduction to Public Health	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D17.2.a Assessment of Foundational Public Health Knowledge for Academic Public Health Master's Degree		
Content	Course number(s) and name(s)	Describe specific assessment opportunity"
Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	SALP 6006 Introduction to Public Health	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)
Explain how globalization affects global burdens of disease	SALP 6006 Introduction to Public Health	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D17.2.a Assessment of Foundational Public Health Knowledge for Academic Public Health Master's Degree		
Content	Course number(s) and name(s)	Describe specific assessment opportunity"
Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)	SALP 6006 Introduction to Public Health	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)</p>

- 3) Provide a matrix, in the format of Template D17-2, that lists competencies for each relevant degree and concentration. The matrix indicates at least one assessment activity for each of the listed competencies. Typically, the school or program will present a separate matrix for each concentration. Note: these competencies are defined by the school or program and are distinct from the foundational public health learning objectives defined in this criterion. (self-study document)

TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in Public Health Fields Epidemiology		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity"
Explain the concepts, methods, and approaches of epidemiology in addressing public health issues to academic, public health practice, and lay audiences and settings.	EPID 6527 Public Health Surveillance	<u>Design of surveillance system oral and written presentation:</u> Students will justify and design a new surveillance system not already established in Puerto Rico that will address the needs of the community. The characteristics of this original surveillance system will be presented orally and in a written document. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6529 Epidemiology of Chronic Diseases	<u>Critical analysis and analytical review and Written report (monograph):</u> Students are randomly distributed into three work groups. The professor assigns each group a topic of current relevance within the epidemiology of chronic diseases. Independently, each student within each group must search and critically analyze an article that evaluates the relationship of interest. An individual report is submitted to the instructor for grading (2% of the final note). The analysis is done individually and then discussed with the other group members. The consensus resulting from the individual critical analyzes, as well as descriptive elements of the epidemiology of the disease, including a discussion of relevant aspects for the formulation of control and prevention plans, must be submitted in writing for the professor's review and grading. This work allows the student to work and develop skills in searching and critically analyzing scientific literature. Students also develop teamwork skills, including participating in decision-making, leadership, communicating findings to an audience, working with recommendations, and

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		answering criticisms of their work in a professional manner. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6535 Epidemiology of Infectious Diseases	<u>Oral presentation</u> : Students will develop an oral presentation based on an infectious disease not discussed in class. Students will be able to discuss the appropriateness of the available epidemiologic study designs and data collection methods when evaluating the transmission dynamics of the selected infectious disease. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6552 Epidemiology Seminar I	<u>Oral presentations</u> : Students will give three group oral presentations. In the first two presentations, students will discuss key historical figures, scientific studies, or events that were important in the historical development of the field of epidemiology and that helped establish some of the epidemiological principles currently used. The third presentation will focus on health events in Puerto Rico. This will allow students to understand the events that contributed to the creation of the field of epidemiology and how different fields impacted its development. Emphasis will be given to several events related to infectious diseases of public health importance. These presentations will also allow students to improve their oral communications skills and foster teamwork. Each student is individually graded. (Section of Syllabus: EVALUATION STRATEGIES)

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
Discuss the significance, pathophysiology, descriptive and analytical epidemiology, and prevention and control measures in relation to the study of infectious and non-infectious diseases as well as other health-related outcomes.	EPID 6528 Epidemiology of Mental Disorders	<u>Oral presentations</u> : Students will give two group oral presentations. In the first presentation, students will present and discuss a key scientific publication in the area of psychiatric epidemiology research. This presentation will allow students to improve their critical thinking skills and to gain a deeper understanding of how to conduct epidemiologic research in this area. In the second presentation, students will present one of the mental disorders issues not discussed in class. Students will broaden their knowledge of the contents of the course by discussing the selected disorder, including the magnitude and significance of the problem, a review of existing descriptive and analytical epidemiological studies, risk factors, comorbidities, prevention and treatment measures, and the economic impact of the disorder. These presentations will also allow students to improve their oral communications skills and foster teamwork. Each student is individually graded. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6529 Epidemiology of Chronic Diseases	<u>Critical analysis and analytical review and Written report (monograph)</u> : Students are randomly distributed into three work groups. The professor assigns each group a topic of current relevance within the epidemiology of chronic diseases. Independently, each student within each group must search and critically analyze an article that evaluates the relationship of interest. An individual report is submitted to the instructor for grading (2% of the final note). The analysis is done individually and then discussed with the other group members. The consensus resulting from the individual critical analyzes, as well as descriptive elements of the epidemiology of the disease, including a discussion of relevant aspects for the formulation of control and

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		prevention plans, must be submitted in writing for the professor's review and grading. This work allows the student to work and develop skills in searching and critically analyzing scientific literature. Students also develop teamwork skills, including participating in decision-making, leadership, communicating findings to an audience, working with recommendations, and answering criticisms of their work in a professional manner. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6535 Epidemiology of Infectious Diseases	<u>Oral presentation</u> : Students will develop an oral presentation based on an infectious disease not discussed in class. Students will be able to discuss the appropriateness of the available epidemiologic study designs and data collection methods when evaluating the transmission dynamics of the selected infectious disease. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6539 Epidemiological Aspects of Public Health Practice	<u>Reflections (oral and written)</u> : As part of this course, students complete a practical experience in epidemiology in an agency in Puerto Rico; the project is defined based on the needs of the agency. As part of the final presentation, students present the project carried out during the summer experience, including the need for the project and its findings. The purpose of the projects has usually been to carry out an in-depth analysis of a public health issue relevant to PR and the agency, and to develop educational material for the general population and health professionals about the selected topic. The educational materials developed will include recommended public health surveillance, prevention, and / or control strategies based on the results of the results of the project. (Section of Syllabus: EVALUATION STRATEGIES)

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
	EPID 6552 Epidemiology Seminar I	<u>Oral presentations</u> : Students will give three group oral presentations. In the first two presentations, students will discuss key historical figures, scientific studies, or events that were important in the historical development of the field of epidemiology and that helped establish some of the epidemiological principles currently used. The third presentation will focus on health events in Puerto Rico. This will allow students to understand the events that contributed to the creation of the field of epidemiology and how different fields impacted its development. Emphasis will be given to several events related to infectious diseases of public health importance. These presentations will also allow students to improve their oral communications skills and foster teamwork. Each student is individually graded. (Section of Syllabus: EVALUATION STRATEGIES)
Design appropriate epidemiological studies with an emphasis on population issues and subject selection, recruitment, data collection methods, and statistical analysis.	BIOE 6535 Statistical Inference	<u>Individual Exams</u> : The exams will cover fundamental topics for hypothesis testing (including Type I and Type II errors, p-values and power), interval estimation and analysis techniques for epidemiological studies, such as association measures and stratified analysis. The exams will be to interpret and solve Public Health issues using biostatistical knowledge and considering the contexts where the studies were designed and implemented. (Section of Syllabus: EVALUATION STRATEGIES)
	BIOE 6545 Introduction to Sampling Theory	<u>Case Study</u> : Students will be divided into a few groups, each tasked with the development of a complex sampling design and analysis proposal from a real population involved in issues of Public Health area. The goal of the analysis is to estimate features of this fixed real population. (Section of Syllabus: EVALUATION STRATEGIES)

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
	BIOE 6555 Regression and Correlation Analysis	<u>Data analysis-individual exams</u> : Two set of exercises with real data will be provided to the students to create a model for explaining the pattern of a random variable using a function with different predicting variables. In addition, during the course several assignments are required with specific topic to develop the skill to create and assess accomplishment of the assumptions related to this type of models. (Section of Syllabus: EVALUATION STRATEGIES)
Assess critically and interpret relevant literature in the area of public health and epidemiology.	EPID 6527 Public Health Surveillance	<u>Design of surveillance system oral and written presentation</u> : Students will justify and design a new surveillance system not already established in Puerto Rico that will address the needs of the community. The characteristics of this original surveillance system will be presented orally and in a written document. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6528 Epidemiology of Mental Disorders	<u>Oral presentations</u> : Students will give two group oral presentations. In the first presentation, students will present and discuss a key scientific publication in the area of psychiatric epidemiology research. This presentation will allow students to improve their critical thinking skills and to gain a deeper understanding of how to conduct epidemiologic research in this area. In the second presentation, students will present one of the mental disorders issues not discussed in class. Students will broaden their knowledge of the contents of the course by discussing the selected disorder, including the magnitude and significance of the problem, a review of existing descriptive and analytical epidemiological studies, risk factors, comorbidities, prevention and treatment measures, and the economic impact of the disorder. These presentations will also allow students to improve their oral communications skills and foster teamwork.

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		Each student is individually graded. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6529 Epidemiology of Chronic Diseases	<u>Critical analysis and analytical review and Written report (monograph)</u> : Students are randomly distributed into three work groups. The professor assigns each group a topic of current relevance within the epidemiology of chronic diseases. Independently, each student within each group must search and critically analyze an article that evaluates the relationship of interest. An individual report is submitted to the instructor for grading (2% of the final note). The analysis is done individually and then discussed with the other group members. The consensus resulting from the individual critical analyzes, as well as descriptive elements of the epidemiology of the disease, including a discussion of relevant aspects for the formulation of control and prevention plans, must be submitted in writing for the professor's review and grading. This work allows the student to work and develop skills in searching and critically analyzing scientific literature. Students also develop teamwork skills, including participating in decision-making, leadership, communicating findings to an audience, working with recommendations, and answering criticisms of their work in a professional manner. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6539 Epidemiological Aspects of Public Health Practice	<u>Reflections (oral and written)</u> : As part of this course, students complete a practical experience in epidemiology in an agency in Puerto Rico; the project is defined based on the needs of the agency. As part of the final presentation, students present the project carried out during the summer experience, including the need for the project and its findings. The purpose of the projects has usually been to carry out an in-depth analysis of a public

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
Apply epidemiological principles and methods in the analysis of public health problems.		health issue relevant to PR and the agency, and to develop educational material for the general population and health professionals about the selected topic. The educational materials developed will include recommended public health surveillance, prevention, and / or control strategies based on the results of the results of the project. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6527 Public Health Surveillance	<u>Design of surveillance system oral and written presentation:</u> Students will justify and design a new surveillance system not already established in Puerto Rico that will address the needs of the community. The characteristics of this original surveillance system will be presented orally and in a written document. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6529 Epidemiology of Chronic Diseases	<u>Critical analysis and analytical review and Written report (monograph):</u> Students are randomly distributed into three work groups. The professor assigns each group a topic of current relevance within the epidemiology of chronic diseases. Independently, each student within each group must search and critically analyze an article that evaluates the relationship of interest. An individual report is submitted to the instructor for grading (2% of the final note). The analysis is done individually and then discussed with the other group members. The consensus resulting from the individual critical analyzes, as well as descriptive elements of the epidemiology of the disease, including a discussion of relevant aspects for the formulation of control and prevention plans, must be submitted in writing for the professor's review and grading. This work allows the student to work and develop skills in searching and critically analyzing scientific literature. Students also develop teamwork skills, including

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		participating in decision-making, leadership, communicating findings to an audience, working with recommendations, and answering criticisms of their work in a professional manner. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6539 Epidemiological Aspects of Public Health Practice	<u>Reflections (oral and written)</u> : As part of this course, students complete a practical experience in epidemiology in an agency in Puerto Rico; the project is defined based on the needs of the agency. As part of the final presentation, students present the project carried out during the summer experience, including the need for the project and its findings. The purpose of the projects has usually been to carry out an in-depth analysis of a public health issue relevant to PR and the agency, and to develop educational material for the general population and health professionals about the selected topic. The educational materials developed will include recommended public health surveillance, prevention, and / or control strategies based on the results of the results of the project. (Section of Syllabus: EVALUATION STRATEGIES)
Apply and interpret a variety of statistical methods for the analysis of epidemiological data using available software packages.	BIOE 6535 Statistical Inference	<u>Individual Exams</u> : The exams will cover fundamental topics for hypothesis testing (including Type I and Type II errors, p-values and power), interval estimation and analysis techniques for epidemiological studies, such as association measures and stratified analysis. The exams will be to interpret and solve Public Health issues using biostatistical knowledge and considering the contexts where the studies were designed and implemented. (Section of Syllabus: EVALUATION STRATEGIES)
	BIOE 6555 Regression and Correlation Analysis	<u>Data analysis</u> : Two set of exercises with real data will be provided to the students to create a models for explaining the pattern of a random variable using a function with different predicting

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		variables. In addition, during the course several assignments are required with specific topic to develop the skill to create and assess accomplishment of the assumptions related to this type of models. (Section of Syllabus: EVALUATION STRATEGIES)
	BIOE 6605 Statistical Computing Applied to Public Health	<u>Project</u> : This evaluation consist in a project presentation student will perform the analysis with the topics studied in class. In this component, students will need to identify a public health problem of interest and perform the corresponding analysis using the topics cover in class. Students will write a short report about their findings and give a short presentation about it. This will encourage student to critical thinking and practice writing across the curriculum as well practicing communication in both scientific and general public. (Section of Syllabus: EVALUATION STRATEGIES)
Communicate effectively, orally and in writing, the results of epidemiological studies for diverse audiences.	EPID 6528 Epidemiology of Mental Disorders	<u>Oral presentations</u> : Students will give two group oral presentations. In the first presentation, students will present and discuss a key scientific publication in the area of psychiatric epidemiology research. This presentation will allow students to improve their critical thinking skills and to gain a deeper understanding of how to conduct epidemiologic research in this area. In the second presentation, students will present one of the mental disorders issues not discussed in class. Students will broaden their knowledge of the contents of the course by discussing the selected disorder, including the magnitude and significance of the problem, a review of existing descriptive and analytical epidemiological studies, risk factors, comorbidities, prevention and treatment measures, and the economic impact of the disorder. These presentations will also allow students to improve their oral communications skills and foster teamwork.

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		Each student is individually graded. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6539 Epidemiological Aspects of Public Health Practice	<u>Reflections (oral and written)</u> : As part of this course, students complete a practical experience in epidemiology in an agency in Puerto Rico; the project is defined based on the needs of the agency. As part of the final presentation, students present the project carried out during the summer experience, including the need for the project and its findings. The purpose of the projects has usually been to carry out an in-depth analysis of a public health issue relevant to PR and the agency, and to develop educational material for the general population and health professionals about the selected topic. The educational materials developed will include recommended public health surveillance, prevention, and / or control strategies based on the results of the results of the project. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6552 Epidemiology Seminar I	<u>Oral presentations</u> : Students will give three group oral presentations. In the first two presentations, students will discuss key historical figures, scientific studies, or events that were important in the historical development of the field of epidemiology and that helped establish some of the epidemiological principles currently used. The third presentation will focus on health events in Puerto Rico. This will allow students to understand the events that contributed to the creation of the field of epidemiology and how different fields impacted its development. Emphasis will be given to several events related to infectious diseases of public health importance. These presentations will also allow students to improve their oral communications skills and foster teamwork. Each student is

**TABLE D17.3.a Assessment of Competencies for Academic Master's Degrees in
Public Health Fields Epidemiology**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity ⁿ
		individually graded. (Section of Syllabus: EVALUATION STRATEGIES)
Propose public health surveillance, prevention, and control strategies based on epidemiological findings for relevant causes of morbidity and mortality in the population.	EPID 6527 Public Health Surveillance	<u>Design of surveillance system oral and written presentation:</u> Students will justify and design a new surveillance system not already established in Puerto Rico that will address the needs of the community. The characteristics of this original surveillance system will be presented orally and in a written document. (Section of Syllabus: EVALUATION STRATEGIES)
	EPID 6539 Epidemiological Aspects of Public Health Practice	<u>Reflections (oral and written):</u> As part of this course, students complete a practical experience in epidemiology in an agency in Puerto Rico; the project is defined based on the needs of the agency. As part of the final presentation, students present the project carried out during the summer experience, including the need for the project and its findings. The purpose of the projects has usually been to carry out an in-depth analysis of a public health issue relevant to PR and the agency, and to develop educational material for the general population and health professionals about the selected topic. The educational materials developed will include recommended public health surveillance, prevention, and / or control strategies based on the results of the project. (Section of Syllabus: EVALUATION STRATEGIES)

**TABLE D17.3.b Assessment of Competencies for Academic Master's Degrees in
Public Health - Industrial Hygiene Program**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity
To anticipate and recognize chemical, physical, and ergonomic hazards in the workplace and the spread from the workplace to the community.	SAAM 6568 Laws and Regulations Applied to Occupational Safety	<p><u>Midterm exam</u>: Includes topics covering regulation of common hazards in the general industry. Exam include risk assessment discussion questions where students recognize and anticipate hazards based on provided information in the question.</p> <p><u>Final exam</u>: This evaluation covers the second half of the topics discussed in the course including aspects of environmental safety affecting communities. Exam include risk assessment discussion questions where students recognize and anticipate hazards based on provided information in the question.</p> <p>(Section of Syllabus: EVALUATION STRATEGIES)</p>
	SAAM 6513 Physical Hazards Laboratory	<p><u>Laboratory Oral Presentation 2</u>: This assessment covers the concepts of measuring sound frequency spectrum from a sound source, as well as the assessment of environmental noise in the field. This evaluation contributes to measure the development of program competencies regarding noise.</p> <p><u>Oral presentation and written lab report 3</u>: Oral presentation and written lab report 3: These assessments cover the topic of occupational noise contour mapping and integrated noise dosimetry in the workplace. In this experiment, students collect real noise data from a workplace in the field both in real time and in an integrated way over time. Students present an assessment of risk in the workplace associated with the their results. This evaluation contributes to measure the development of program competencies regarding noise.</p> <p><u>Oral Laboratory Presentation 4</u>: This assessment covers the concepts of measuring exposure to segmental and/or whole body vibration from a vibrating source. This evaluation contributes to</p>

**TABLE D17.3.b Assessment of Competencies for Academic Master's Degrees in
Public Health - Industrial Hygiene Program**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		measure the development of program competencies regarding noise. <u>Oral presentation of laboratory 6:</u> This evaluation covers the concepts of measuring area exposure to heat stress in the field. This evaluation contributes to measure the development of program competencies regarding noise. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 6526 Principles of Industrial Ergonomics	<u>Monograph:</u> summative approach where students will demonstrate their competencies in the ergonomic process of risk factor measurement, analysis and basic design of controls. Students identify and anticipate ergonomic hazards in a workplace environment through their analysis. (Section of Syllabus: EVALUATION STRATEGIES)
Effectively Communicate potential hazards associated with workplace operation and products.	SAAM 6513 Physical Hazards Laboratory	<u>Oral presentation and written lab report 3:</u> These assessments cover the topic of occupational noise contour mapping and integrated noise dosimetry in the workplace. In this experiment, students collect real noise data from a workplace in the field both in real time and in an integrated way over time. Students present an assessment of risk in the workplace associated with the their results. This evaluation contributes to measure the development of program competencies regarding noise. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 6548 Industrial Hygiene Laboratory	<u>Written Report and Oral Presentation of Risk Assessments: Laboratory 6:</u> These evaluations represent an integrative experience in the field from the calibration of a sampling train, its use in a real study in the sampling field and the use of an accredited laboratory for chemical analysis of samples with the corresponding calculation of concentration of the contaminant in the air. These experiences are based on real-world workplace scenarios.

**TABLE D17.3.b Assessment of Competencies for Academic Master's Degrees in
Public Health - Industrial Hygiene Program**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		Students produce a written report and an oral presentation of findings. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 6572 Design of Controls in Ergonomics	<u>Ergonomic process proposal</u> : summative approach where students will demonstrate their competencies in the ergonomic process of risk factors measurement, analysis and basic design of controls. Students will propose a design for the control of exposure to risk factors. <u>Proposal Oral presentation</u> :- summative approach where students will demonstrate their competencies conveying information about potential ergonomic hazards in workplaces. (Section of Syllabus: EVALUATION STRATEGIES)
To design and manage industrial hygiene and occupational health and safety programs.	ADSS 6518 Organizational and Administrative Aspects of Occupational Health & Industrial Hygiene Programs	<u>Planning Project</u> : As the major project for this course, you will prepare a complete program and evaluation plan that addresses an Occupational Hygiene and Safety issue in a specific organization, including a safety and health guidelines document addressing the same Occupational Hygiene and Safety issue. You will not need to implement the intervention or conduct the evaluation. The plan will be grounded in the real world, and thus draw on real data and other information gathered in the needs assessment and planning processes. Once your team has been formed, it is your responsibility to organize and facilitate the team's work. You will work with your team throughout the trimester, with the bulk of the work done outside of class, although we will have some in- class working sessions. The team will produce a single final document, and all members of the group will receive the same grade for the draft and the final document. You

**TABLE D17.3.b Assessment of Competencies for Academic Master's Degrees in
Public Health - Industrial Hygiene Program**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		will have several formal and informal opportunities to receive feedback on this project throughout the semester. Students must provide the instructor with copies of their individual contributions to the project to assess their performance and receive feedback. (Section of Syllabus: EVALUATION STRATEGIES)
To analyze worker exposure aimed at assessing, for the short and long term perspectives, the occupational health and safety risk associated to potential occupational injuries, illnesses and fatalities.	SAAM 6547 Basic Principles in Occupational Safety	<u>Final Monograph</u> : Students identify a real-life organizational accident or incident for evaluation. Students use different tools to analyze the event and present a critical perspective through a plan that discusses the causes of the accident or incident and potential preventive measures. An evaluation of the organization's safety culture must be included in the analysis. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 6567 Management Tools for Industrial Hygienists	<u>Case Study Presentation</u> : Students are required to recognize potential hazards in a theoretical productive process, identifying similar exposure groups (SEG) for each of the identified hazards and, based on an assigned budget, prioritize which hazards and SEGs they choose for an objective risk assessment. (Section of Syllabus: EVALUATION STRATEGIES)
To design control measures to reduce chemical, physical, biological and ergonomic occupational health and safety hazards to safe levels.	SAAM 6572 Design of Controls in Ergonomics	<u>Ergonomic process proposal</u> : summative approach where students will demonstrate their competencies in the ergonomic process of risk factors measurement, analysis and basic design of controls. Students will propose a design for the control of exposure to risk factors. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 6512 Physical Hazards Control	<u>Applied Noise Control Project</u> : Requires students to identify a noise source they wish to control through the use of an acoustic enclosure or through changing the acoustics of the room where the noise source is located. Students are expected to assess the noise source through frequency spectrum analysis. Based on the

**TABLE D17.3.b Assessment of Competencies for Academic Master's Degrees in
Public Health - Industrial Hygiene Program**

Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		analysis students will identify acoustic materials and design measures to mitigate noise levels. (Section of Syllabus: EVALUATION STRATEGIES)
	SAAM 6565 Chemical Risk Management	<u>Exam</u> : Exams evaluate knowledge, methods and control measure design competency. Students are given detailed cases based on which they have to design chemical control measures. (Section of Syllabus: EVALUATION STRATEGIES)
To develop and disseminate, specifically for the workplace, occupational health and safety policies, standards, and guidelines to protect workers and the community.	SAAM 6570 Response and Preparation for Emergencies and Hazardous Operations	<u>Risk and/or Emergency Management Operation Plan</u> : Students will be assigned a problem and scenario (organization) to analyze risk and hazards and develop emergency operations plan to address them. Students are expected to disseminate the plan with the organization and/or scenario. (Section of Syllabus: EVALUATION STRATEGIES)
	ADSS 6518 Organizational and Administrative Aspects of Occupational Health & Industrial Hygiene Programs	<u>Planning Project</u> : As the major project for this course, you will prepare a complete program and evaluation plan that addresses an Occupational Hygiene and Safety issue in a specific organization, including a safety and health guidelines document addressing the same Occupational Hygiene and Safety issue. You will not need to implement the intervention or conduct the evaluation. The plan will be grounded in the real world, and thus draw on real data and other information gathered in the needs assessment and planning processes. Once your team has been formed, it is your responsibility to organize and facilitate the team's work. You will work with your team throughout the trimester, with the bulk of the work done outside of class, although we will have some in- class working sessions. The team will produce a single final document, and all members of the group will receive the same grade for the draft and the final document. You will have several formal and informal opportunities to receive

TABLE D17.3.b Assessment of Competencies for Academic Master's Degrees in Public Health - Industrial Hygiene Program		
Competency	Course number(s) and name(s)	Describe specific assessment opportunity
		feedback on this project throughout the semester. Students must provide the instructor with copies of their individual contributions to the project to assess their performance and receive feedback. (Section of Syllabus: EVALUATION STRATEGIES)
Effectively collaborate as part of a team in the recognition, evaluation and control of typical problems faced by the industrial hygienist at work.	SAAM 6566 Field Study of Occupational Environments	<u>Site-Visit Report</u> : Students visit different organizations and occupational scenarios in groups. Students observe and recognize occupational hazards, do a qualitative evaluation, and propose control measures if necessary. Teams must display effective teamwork in all tasks and peer-evaluations are used to measure teamwork skills. (Section of Syllabus: EVALUATION STRATEGIES)

- 4) **Identify required coursework and other experiences that address the variety of public health research methods employed in the context of a population health framework to foster discovery and translation of public health knowledge and a brief narrative that explains how the instruction and assessment is equivalent to that typically associated with a three-semester-credit course.**

Masters in Science in Epidemiology:

Epidemiology methods' required courses (9 credits)

EPID 6523: Epidemiological Methodology (4 credits)

This course presents the epidemiological principles and methods as an approach to study of phenomena of health and disease as well as their determinants. After completing the course, students will be able to use the epidemiological method as a tool to describe and analyze diseases and other public health problems in the community. The concepts of causality, descriptive epidemiology, hypothesis formulation, analytical epidemiology, and screening will acknowledge the relevance of epidemiology in the implementation of suitable diseases control and prevention measures, the health services planning, and to study the causes and natural history of diseases. Student assessments include exams and a case study. In the case study, through teamwork, the students will have the opportunity to work with their classmates in small teams in solving hypothetical public health problems applying the epidemiological method. The students will write a report describing the results of the analysis used by the team to study the problem using an epidemiological perspective.

EPID 6549: Advanced Research Methods in Epidemiology (5 credits)

This is a course in advanced epidemiological research geared to students of the master's in sciences in epidemiology program. It focuses on the different epidemiologic research designs, their characteristics, advantages and disadvantages. Data collection methods are also examined in terms of the adequacy of each one for the different epidemiologic research designs discussed. The students will have the opportunity to develop and to apply the statistic reasoning necessary for the quantitative analysis of each of the research designs studied. The students will also have the opportunity to discuss various statistics packages to carry out the statistical analysis for each design. It is expected that the students will be able to integrate and apply the acquired knowledge in: (1) the elaboration of the different epidemiologic research designs, (2) selecting the most adequate data collection methods and statistical analysis according to the design, (3) determining the sample size according to the design, (4) identifying the statistical packages and their application to epidemiology. Student assessments include exams and assignments.

Biostatistics methods' required courses (19 credits)

BIOE 6525: Statistical Analysis (5 credits)

The purpose of the course is to provide participants with tools to identify, design, apply and explain the most appropriate qualitative, quantitative, and mixed statistical methods for investigation of various public health issues at multiple (individual, group, organization, community, and population) levels. The main topics of the course are the following: linear regression models, stratified analysis, logistic regression model, Poisson regression model and survival analysis. To facilitate statistical calculations, some statistical software will be used, such as Stata or SPSS. The course will be offered face-to-face, through interactive lectures, practical exercises, and discussions. At the end of the course, the student will be trained for the analysis and interpretation of data related to different epidemiological designs. Student assessments include assignments, exams, and a case study or

project. The project aims to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. Student assessments include exams.

BIOE 6535: Statistical Inference (4 credits)

Statistical inference and its application to decision making utilizing experimental and survey data. The course includes lectures and problems sessions on the following topics: mathematical theory of probability, binomial model, normal distribution, Poisson distribution, use and interpretation of significance tests, basic regression analysis of variance, and non-parametric tests. Student assessments include exams and teamwork assignments.

BIOE 6545: Introduction to Sampling Theory (3 credits)

The theory and application of sampling is presented. Simple random, stratified, and systematic samples, subsampling, cost factors and sources of error are discussed. The use of sampling theory in surveys is emphasized. Student assessments include exams, exercises, and the development of a sampling design and analysis research proposal from a real population involved in issues of Public Health area.

BIOE 6555: Regression and Correlation Analysis (3 credits)

This course covers the regression and correlation of paramedic statistics: linear and simple nonlinear regression and correlation, minimum squares biased and unbiased estimators; confidence intervals, and variance analysis of residual errors; and review of the literature concerning matrixes and determinants. Student assessments include exams and teamwork assignments.

BIOE 6605: Statistical Computing Applied to Public Health (4 credits)

This course introduces the students to the use of statistical computing packages and its use in the management of public health statistics. Student assessments include exams, homework, and a writing component. In the writing component, a research article will be provided, and students will perform the analysis with the topics studied in class.

Research project (thesis) required courses (10 credits)

EPID 6561: Epidemiological Research I (4 credits)

The main objective of this course is to prepare the student with the required knowledge to design an epidemiologic research. The student must complete the research study proposal in order to pass the course.

EPID 6562: Epidemiological Research II (4 credits)

The main objective of this course is to prepare the student to apply the required knowledge to conduct an epidemiological research. The student must complete the data analysis phase of the research study in order to pass the course.

EPID 6562: Epidemiological Research III (2 credits)

The main objective of this course is to prepare the student to apply the required knowledge to analyze and interpret epidemiologic research. The student must complete the research study in order to pass the course.

Masters in Science in Industrial Hygiene:

The Masters in Science in Industrial Hygiene is a highly specialized applied degree. Its focus is not on research but in applied methods of measurement and analysis required for applied practice in occupational health. Many of the courses are practice laboratories where quantitative methods are applied using fieldwork. In what follows the courses that provide research and applied methodological skills in the program.

Biostatistics and Epidemiology methods' required courses (19 credits)

BIOE 6525: Statistical Analysis (5 credits)

The purpose of the course is to provide participants with tools to identify, design, apply and explain the most appropriate qualitative, quantitative, and mixed statistical methods for investigation of various public health issues at multiple (individual, group, organization, community, and population) levels. The main topics of the course are the following: linear regression models, stratified analysis, logistic regression model, Poisson regression model and survival analysis. To facilitate statistical calculations, some statistical software will be used, such as Stata or SPSS. The course will be offered face-to-face, through interactive lectures, practical exercises, and discussions. At the end of the course, the student will be trained for the analysis and interpretation of data related to different epidemiological designs. Student assessments include assignments, exams, and a case study or project. The project aims to apply the concepts learned in the course to answer a research question and considers the use of statistical software as a fundamental tool. Student assessments include exams.

EPID 6523: Epidemiological Methodology (4 credits)

This course presents the epidemiological principles and methods as an approach to study of phenomena of health and disease as well as their determinants. After completing the course, students will be able to use the epidemiological method as a tool to describe and analyze diseases and other public health problems in the community. The concepts of causality, descriptive epidemiology, hypothesis formulation, analytical epidemiology, and screening will acknowledge the relevance of epidemiology in the implementation of suitable diseases control and prevention measures, the health services planning, and to study the causes and natural history of diseases. Student assessments include exams and a case study. In the case study, through teamwork, the students will have the opportunity to work with their classmates in small teams in solving hypothetical public health problems applying the epidemiological method. The students will write a report describing the results of the analysis used by the team to study the problem using an epidemiological perspective.

Industrial Hygiene Research Courses:

SAAM 6571: Research topics in occupational epidemiology and health.

The main objective in this course is to allow masters students in the industrial hygiene program to acquire knowledge and skills required for their scientific evaluation of health problems related to their workplaces and occupational tasks. Students are expected to develop skills in the use of scientific methods to evaluate, design, and justify interventions, and establish strategies for the prevention of industrial hygiene risk factors. The course addresses basic occupational epidemiology principles through discussion and comparison of research articles focusing on health issues in workers. It also discusses the application of scientific research methods that allow students to answer questions regarding prevention and control of occupational injuries and illnesses.

Industrial Hygiene Methods Courses:

SAAM 6513: PHYSICAL HAZARDS LABORATORY

This course is designed for industrial hygiene students and presents theory and hands-on aspects of the occupational hazard assessment process on physical hazards in the workplace. The course content includes the discussion, laboratory exercises and field work in modern methods applied to the evaluation of physical hazards in the workplace. Sampling, monitoring, and analysis for applied noise, vibration, ionizing radiation and heat, are also emphasized. Course instructor will present techniques used in noise and vibration integrated monitoring and frequency spectrum analysis, as well as those used in real time and integrated ionizing radiation and heat stress monitoring. This course may require that some class meetings be held at upr-cayey, nec 018, where the ih program has located its ventilation tunnel laboratory.

SAAM 6548: INDUSTRIAL HYGIENE LABORATORY

This course will offer the student the opportunity to learn the theoretical basis of operation of industrial hygiene instruments, their calibration and use. The emphasis will be upon the importance of calibration, the sampling techniques and the statistical analysis of sampling data. This course is a must for students who desire a concentration of courses in occupational health. Only ten (10) students will be accepted per trimester per section in order to optimize the use of available equipment and increment communication.

SAAM 6573: CHEMICAL RISK LABORATORY

This course is designed for students from the industrial hygiene program and presents theory and practical aspects regarding chemical hazard control and indoor air quality as it pertains to occupational health. Course content includes: evaluation of indoor air contaminants, such as, carbon monoxide and bio aerosols; general and local ventilations systems monitoring; and qualitative and quantitative respiratory protection fit testing. Instructional strategies include classroom discussion, laboratory exercises, field studies focused on modern workplace assessment methods for ventilation systems and respiratory protection. Since course delivery includes diagnostic techniques for ventilation systems performance and respiratory fit testing techniques used in general industrial hygiene, some of the laboratory sessions will be held at the wind tunnel laboratory facility at the University of Puerto Rico Cayey campus.

5) Briefly summarize policies and procedures relating to production and assessment of the final research project or paper. (self-study document)

Master of Science (MS) with a Specialty in Epidemiology:

The Master of Science (MS) with a Specialty in Epidemiology is an academic degree that aims to provide its students with the knowledge, skills, and attitudes necessary to carry out research work aimed at studying the distribution of diseases in the population and to determine factors associated with that distribution. For this reason, the final graduation requirement for the MS student is to complete a research project (thesis).

Starting in the 2019-20 academic year the student is offered the option, in agreement with their mentors, to select between delivering the final product of their research in the traditional monograph format or preparing a scientific publication. Regardless of the format to be used, as a final requirement for the degree, students must present a written document where the thesis project carried out is presented. If the student completed the thesis in the scientific publication format, they must deliver

a copy in digital format (PDF). If the student completed the thesis in monograph format, they must submit two bound copies of it. One of these copies will be available at the RCM Conrado F. Asenjo Library and the other will be available at the Department of Biostatistics and Epidemiology.

The student must enroll in a sequence of three courses in order to design and execute their research work (thesis): EPID 6561 (4 credits), EPID 6562 (4 credits), and EPID 6563 (2 credits). A more detailed description of these courses appears in the previous section.

The student's Thesis Committee is established once the student satisfactorily passes all the courses offered in the first year of the MS. The Committee has at least two members: a mentor or preceptor from the Epidemiology faculty and a mentor or preceptor from the Biostatistics faculty. The Committee may have other members as determined by these two mentors. Once the entire research process is completed, students must defend their research study orally before the academic community. The presentation will have a maximum duration of 20-30 minutes.

Masters in Science in Industrial Hygiene:

In their final integrative experience, students in the Masters in Science in Industrial Hygiene program take the course SAAM 6548: Industrial Hygiene Internship. In this course students do an internship in an industrial site that can be commercial, that offers hospital services or with a government agency. Students have a internship site preceptor and a faculty preceptor that guide the process. Students prepare a plan about their activities that must be approved by both preceptors. During the internship students must perform tasks in anticipation, evaluation, recognition and control of risks and hazards. Among the alternatives for the internship are: a research project or the development of an Industrial Hygiene program for the practice site. Students must provide a detailed report of their activities and must present them orally to fulfill all the requirements of the course.

- 6) **Provide links to handbooks or webpages that contain the full list of policies and procedures governing production and assessment of the final research project or paper for each degree program. (electronic resource file)**

See thesis manual in the **Electronic Resource File D17.6.**

- 7) **Include completed, graded samples of deliverables associated with the major paper or project. The school or program must provide at least 10% of the number produced in the last three years or five examples, whichever is greater. (electronic resource file)**

See samples in **Electronic Resource File D17.7.**

- 8) **Briefly explain how the school or program ensures that the instruction and assessment in basic public health knowledge is generally equivalent to the instruction and assessment typically associated with a three-semester-credit course. (self-study document)**

Students in the MS with a Specialty in Epidemiology program are required to take the same introductory course that all MPH students take to ground them in each of the defined foundational public health learning objectives described in criterion D-1 (MPH Foundational Public Health Knowledge): the SALP 6006-Introduction to Public Health course.

- 9) **Include the most recent syllabus for any course listed in the documentation requests above, or written guidelines for any required elements that do not have a syllabus. (electronic resource file)**

The syllabus for the SALP 6006-Introduction to Public Health course is included in the **Electronic Resource File D1.2.**

- 10) **If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

Strengths:

- The MS with Specialty in Epidemiology is a high-demand program that produces high-demand graduates, most of which are hired before finishing the degree. Also, students also graduate with a solid foundation in biostatistical methods, which enhances the hiring options for graduating students.

Weaknesses:

- Due to available resources, only 10 students are admitted to this high-demand program every year. Also, since most courses are only offered once in the school year and students need to take courses in a specific order due to prerequisites, failing any course automatically delays the student's graduation date a year, which has a deleterious impact in graduation rates.

Lessons Learned

- Learning assessment opportunities for courses not shared with MPH students need to be aligned with required competencies. These courses need to be revised and aligned to the school's competency-based model.

D18. ACADEMIC PUBLIC HEALTH DOCTORAL DEGREES

NOT APPLICABLE

D19. ALL REMAINING DEGREES

Students enrolled in any of the SPH's degree programs that are not addressed in Criteria D2, D3, D9, D17 or D18 complete coursework that provides instruction in the foundational public health knowledge at a level of complexity appropriate to the level of the student's degree program. For example, if an SPH offers bachelor's degrees in concentrations other than public health, it may be more appropriate for courses addressing the learning objectives listed below to be held separately from those offered for graduate students. This instruction may be delivered through online, in-person or blended methodologies, but it must meet the following requirements while covering the defined content areas.

- 1) **Provide a matrix in the format of Template D19-1 that indicates the required assessment opportunities for each of the defined foundational public health learning objectives (1-12). Typically, the school will present a separate matrix for each degree program, but matrices may be combined if requirements are identical. (self-study document)**

TABLE D19.1.a. Assessment of Foundational Public Health Knowledge for All Remaining Degrees		
Content	Course number(s) and name(s)	Describe specific assessment opportunity"
Explain public health history, philosophy and values	SALP 6006 Introduction to Public Health	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam. (Section of Syllabus: EVALUATION STRATEGIES)
Identify the core functions of public health and the 10 Essential Services*	SALP 6006 Introduction to Public Health	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam. (Section of Syllabus: EVALUATION STRATEGIES)
Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health	SALP 6006 Introduction to Public Health	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D19.1.a. Assessment of Foundational Public Health Knowledge for All Remaining Degrees

Content	Course number(s) and name(s)	Describe specific assessment opportunity ^a
List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program	SALP 6006 Introduction to Public Health	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D19.1.a. Assessment of Foundational Public Health Knowledge for All Remaining Degrees

Content	Course number(s) and name(s)	Describe specific assessment opportunity ^a
Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.	SALP 6006 Introduction to Public Health	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D19.1.a. Assessment of Foundational Public Health Knowledge for All Remaining Degrees

Content	Course number(s) and name(s)	Describe specific assessment opportunity ^a
<p>Explain the critical importance of evidence in advancing public health knowledge</p>	<p>SALP 6006 Introduction to Public Health</p>	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D19.1.a. Assessment of Foundational Public Health Knowledge for All Remaining Degrees

Content	Course number(s) and name(s)	Describe specific assessment opportunity ^a
Explain effects of environmental factors on a population's health	SALP 6006 Introduction to Public Health	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D19.1.a. Assessment of Foundational Public Health Knowledge for All Remaining Degrees

Content	Course number(s) and name(s)	Describe specific assessment opportunity ^a
Explain biological and genetic factors that affect a population's health	SALP 6006 Introduction to Public Health	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D19.1.a. Assessment of Foundational Public Health Knowledge for All Remaining Degrees

Content	Course number(s) and name(s)	Describe specific assessment opportunity ^a
Explain behavioral and psychological factors that affect a population's health	SALP 6006 Introduction to Public Health	<p><u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)</p>

TABLE D19.1.a. Assessment of Foundational Public Health Knowledge for All Remaining Degrees

Content	Course number(s) and name(s)	Describe specific assessment opportunity ^a
Explain the social, political and economic determinants of health and how they contribute to population health and health inequities	SALP 6006 Introduction to Public Health	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)
Explain how globalization affects global burdens of disease	SALP 6006 Introduction to Public Health	<u>Public Health Knowledge Assessments</u> The Public Health (PH) Knowledge Assessments will cover the sections of material for which they are scheduled. The PH Knowledge Assessments will be comprised of multiple-choice questions (After completing the assessment students will receive feedback on their score. Students can use this information to study during the trimester for the final exam. (Section of Syllabus: EVALUATION STRATEGIES)

TABLE D19.1.a. Assessment of Foundational Public Health Knowledge for All Remaining Degrees		
Content	Course number(s) and name(s)	Describe specific assessment opportunity ^a
Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)	SALP 6006 Introduction to Public Health	<u>Public Health Case Study Analysis</u> The purpose of the Public Health Case Analysis is to give students an opportunity to apply Public Health concepts and theories during their in-class readings and discussions in the analysis of a community case study. The case study will present a Public Health issue in the community. Students will analyze a current public health problem using all the core public health knowledge covered in the course under the guidance of case-study preceptors. Case-study analysis will include: 1) establishing the assigned issue as a public health problem using appropriate public health measures; 2) identifying the biological, behavioral, community, social, environmental and health system determinants on the assigned issue; 3) presentation of prevention and health promotion strategies; and identifying public health ethical issues related to the assigned case. Students will have the opportunity to discuss the case in interdisciplinary group throughout the course. Promotion and preventive strategies will be presented. Case-study analysis will be guided by working documents that utilize the epidemiological triad, ecological model and social determinants of health models presented throughout the course. The case studies include online group work with the use of forums and cloud-based online working documents, and online group discussions. The public health case study instructions and guidelines will be presented in a special session. The 25% this evaluation strategy represents will be divided as follows: 8% Oral Presentation, 12% Case-study written report, and 5% Peer Assessments. Also, preceptors will evaluate each student based on knowledge and skills demonstrate in the case study analysis process. (See Appendix for Instructions and Rubrics). (Section of Syllabus: EVALUATION STRATEGIES)

- 2) **Briefly explain how the school ensures that the instruction and assessment in introductory public health knowledge is generally equivalent to the instruction and assessment typically associated with a three-semester-credit course. (self-study document)**

All students in non-public health MS programs are required to take SALP 6006: Introduction to Public Health course. This is the same course used for the assessment of foundational public health knowledge in our MPH programs with its accompanying assessment methods. All MS students also take as part of the curriculum EPID 6523 Epidemiological Methodology and BIOE 6525: Statistical Analysis. These three courses account for 12 credits that include foundational public health knowledge and two of the core disciplines of public health.

The GSPH's non-public health programs have courses as part of their curriculum that incorporate public health perspectives. The curriculum of these GSPH programs is presented below.

TABLE D19.2.a Master in Health Services Administration (MHSA) Curriculum	
CURRICULUM	Credits
<i>CORE PUBLIC HEALTH COURSES</i>	
SALP 6006 Introduction to Public Health	3
EPID 6523 Epidemiological Methodology	4
SALP 6251 Leadership in Public Health	2
<i>SPECIALTY</i>	
ADSS 6490 Strategic Planning for Health Services Organizations	3
ADSS 6546 Hospital Administration	3
ADSS 6579 Organizational Behavior	3
ADSS 6583 Legal Aspects in Health Services	3
ADSS 6584 Health Politics and Policy	3
ADSS 6585 Health Economics	3
ADSS 6586 Health Systems	3
ADSS 6591 Quantitative Decision-Making Analysis for Health Services Administration I	3
ADSS 6592 Quantitative Decision-Making Analysis for Health Services Administration II	3
ADSS 6598 Information Systems in Health Services Administration	3
ADSS 6607 Cost Accounting in Health Services	3
ADSS 6525 Introduction to Health Care Management	3
ADSS 6609 Health Care Financial Management	3
ADSS 6610 Principles of Health Insurance and Managed Care	3
ADSS 6625 Human Resources Management	4
ADSS 6606 Capstone Seminar in Health Services Administration	3
ADSS 6535 Continuous Quality Improvement in Health Care	3
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
ADSS 6597 Administrative Residency	800 hours
<i>ELECTIVES</i>	
Electives	6
TOTAL	67 + 800 hrs

TABLE D19.2.b. Master of Science in Demography Curriculum	
CURRICULUM	Credits
<i>CORE PUBLIC HEALTH COURSES</i>	
SALP 6006 Introduction to Public Health	3
BIOE 6525 Statistical Analysis	5
CISO 6547 Population and Society	3
EPID 6523 Epidemiological Methodology	4
BIOE 6535 Statistical Inference	4
<i>SPECIALTY</i>	
DEMO 6500 Introduction to Demography	4
DEMO 6546 Mortality	4
DEMO 6555 Fertility and Population Growth	4
DEMO 6560 Research Methods in Demography	4
DEMO 6565 Migration, Population Distribution and Urbanism	4
DEMO 6602 Seminar on Demographic Studies in Puerto Rico	3
DEMO 6606 Use of SPSS Program and other Scientific Research	4
DEMO 6607 Population and Economy	4
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
DEMO 6615 Supervised Practice in Demography	3
DEMO 6621 Research Project I	2
DEMO 6622 Research Project II	4
<i>ELECTIVES</i>	
Electives	11
TOTAL	70

TABLE D19.2.c. Master of Science with Concentration in Evaluation Research of Health Systems Curriculum	
CURRICULUM	Credits
<i>CORE PUBLIC HEALTH COURSES</i>	
SALP 6006 Introduction to Public Health	3
BIOE 6525 Statistical Analysis	5
EPID 6523 Epidemiological Methodology	4
ADSS 6594 Public Health Program Planning and Evaluation	4
<i>SPECIALTY</i>	
BIOE 6535 Statistical Inference	4
BIOE 6555 Regression and Correlation Analysis	3
BIOE 6605 Statistical Computing Applied to Public Health	4
EVAL 6610 Principles of Evaluation	3
EVAL 6611 Evaluation Models	3
EVAL 6615 Development of Measurement Instruments	3

TABLE D19.2.c. Master of Science with Concentration in Evaluation Research of Health Systems Curriculum	
CURRICULUM	Credits
EVAL 6515 Conceptualization and Methodology for Evaluation Research	4
EVAL 6620 Applied Statistics for Evaluation Research Studies	3
EVAL 6628 Principles of Cost-Benefit Analysis	3
EVAL 6630 Strategies for Evaluation and Communication	3
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
EVAL 6650 Evaluation Practices	1
EVAL 6511 Introductory Proposal Seminar	1
EVAL 6512 Intermediary Proposal Seminar	1
EVAL 6513 Advanced Proposal Seminar	1
EVAL 6700 Thesis Project	3
<i>ELECTIVES</i>	
Electives	6
TOTAL	62

TABLE D19.2.e. Master of Health Sciences with Concentration in Nutrition Curriculum	
CURRICULUM	Credits
<i>CORE PUBLIC HEALTH COURSES</i>	
SALP 6006 Introduction to Public Health	3
BIOE 6525 Statistical Analysis	5
EPID 6523 Epidemiological Methodology	4
<i>SPECIALTY</i>	
NUTR 6521 Biochemistry and Nutrition I	2
NUTR 6523 Biochemistry and Nutrition II	2
NUTR 6528 Seminar in Public Health Nutrition	2
NUTR 6531 Human Nutrition	3
NUTR 6533 Nutrition in Public Health	3
DEMO 6606 Use of SPSS Program and other Scientific Research	4
NUTR 6538 Evaluation of Nutritional Status	3
NUTR 6570 Nutritional Research Methodology	3
NUTR 6555 Quality of Life and Nutrition of Persons Fifty Years and Over	2
NUTR 6560 Planning of Nutrition Program	2
<i>PRACTICE AND INTEGRATIVE LEARNING EXPERIENCE</i>	
NUTR 6535 Research Project	6
<i>ELECTIVES</i>	
Electives	3
TOTAL	47

- 3) **Include the most recent syllabus for any course listed in the documentation requests above, or written guidelines for any required elements that do not have a syllabus. (electronic resource file)**

Syllabus for SALP 6006: Introduction to Public Health available in **Electronic Resource File D1.2**.
Other Syllabi and **documentation** available in **Electronic Resource File D19.2**.

- 4) **If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

Strengths

- All academic program curricula provide solid public health foundations combined with degree specific and research competencies. The curriculums cover important professional areas with academic rigor.
- Our students are sought by employers due to their skills acquired during their master's degrees at the Graduate School of Public Health.

Weaknesses

Lessons Learned

- Alumni of the GSPH are well prepared to compete for employment in Puerto Rico and elsewhere.

D20. DISTANCE EDUCATION

NOT APPLICABLE

E1. FACULTY ALIGNMENT WITH DEGREES OFFERED

Faculty teach and supervise students in areas of knowledge with which they are thoroughly familiar and qualified by the totality of their education and experience. Faculty education and experience is appropriate for the degree level (bachelor's, master's, doctoral) and the nature of the degree (research, professional practice, etc.) with which they are associated. Education refers to faculty members' degrees, certifications, fellowships, post-doctoral training, formal coursework completed, etc. Experience refers to a range of activities including substantial employment or involvement in public health activities outside of academia. Experience also refers to the depth of service provided to professional and community-based public health organizations and to peer-reviewed scholarship in a discipline. Finally, experience relates to the individual's record of excellence in providing instruction in a discipline.

- 1) Provide a table showing the school or program's primary instructional faculty in the format of Template E1-1. The template presents data effective at the beginning of the academic year in which the final self-study is submitted to CEPH and must be updated at the beginning of the site visit if any changes have occurred since final self-study submission. The identification of instructional areas must correspond to the data presented in Template C2-1. Schools should only include data on faculty associated with public health degrees. (self-study document)

TABLE E1.1. GSPH Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021						
Name*	Title/ Academic Rank	Tenure Status or Classification^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
Peña-Orellana, Marisol	Associate Professor	NT	B.S. M.S. Ed.D.	University of Puerto Rico University of Puerto Rico Interamerican University of Puerto Rico	General Sciences Epidemiology Education	MPH – General Option
Rivera-Gutiérrez, Ralph	Professor	T	B.A. M.S.W. Ph.D.	University of Puerto Rico Boston University Brandeis University	Psychology; Community Organization, Management and Planning; Health Policy	MPH – General Option
Marchand-Arias, Rosa E.	Professor	T	B.A. M.A. Ph.D.	Columbia University University of Michigan University of Michigan	Latin American Studies Anthropology Anthropology	MPH- General Option

TABLE E1.1. GSPH Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classification^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
Bonilla-Soto, Luis A.	Professor	T	B.S. M.S. Ph.D. MSc Certificate MPH MS Certificate	University of Puerto Rico	Biology, Marine Sciences, Oceanography, Clinical Research, Bioethics, Public Health Biostatistics, Demography, Data Scientist	Environmental Health
Seguinot-Barbosa, José	Professor	T	B.A. M.A. Ph.D. J.D. Post. Doc Post. Doc. Certificate	University of Puerto Rico, National University of Mexico Louisiana State University University of Puerto Rico Laval University University of Alcalá Interamerican University	Geography, Geography and Natural Resources, Geography-minor Geology, Law, Global Environmental Changes, GIS Applied to Health, Mediation	Environmental Health
Norat-Ramírez, José A.	Professor	T	B.S. M.S. Ph.D. J.D	Cornell University, University of Michigan University of Puerto Rico	Civil Engineering Environmental Engineering Environ Planning Law	Environmental Health
Mansilla-Rivera, Imar	Professor	T	B.S. Ph.D.	University of Puerto Rico University of Michigan	Chemistry; Environmental Health Sciences	Environmental Health
Rodríguez-Sierra, Carlos J.	Professor	T	B.S. M.S. Ph.D. Post Doc	Florida State University Indiana University University of Wisconsin University of Puerto Rico	Biology Environmental Sciences Environmental Toxicology Environmental Toxicology	Environmental Health

TABLE E1.1. GSPH Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classification^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
Méndez-Lázaro, Pablo	Associate Professor	T	B.A. M.S. Ph.D.	University of Puerto Rico University of Cádiz, Spain Universidad de Salamanca, Spain	Geography Coastal Management Water Resources Management	Environmental Health
Ramos-Valencia, Gilberto	Professor	T	B.A. M.S. Dr.P.H.	University of Puerto Rico University of Pittsburgh	Sociology Demography Biostatistics; Public Health	Biostatistics
Amaya-Ardila, Claudia P.	Assistant Professor	NT	B.S. M.S. M.P.H Ed.D.	Industrial University of Santander, Colombia University of Puerto Rico University of Puerto Rico	Mathematics, Applied Mathematics Biostatistics Education	Biostatistics
Suárez-Pérez, Erick L.	Professor	T	B.A. M.S. Ph.D.	National University of Mexico National University of Mexico London School of Hygiene and Tropical Medicine	Actuary Sciences Biostatistics Medical Statistics	Biostatistics
Almodovar Rivera, Israel	Assistant Professor	NT	B.S. M.S. M.S. Ph.D.	University of Puerto Rico University of Puerto Rico Iowa State University Iowa State University	Mathematics Applied Mathematics Statistics Statistics	Biostatistics
Da Luz Sant'Ana, Istoni	Assistant Professor	NT	B.S. M.S. Ph.D.	Rio de Janeiro State Univ. University of Granada University of Granada	Statistics Applied Statistics Mathematics and Statistics	Biostatistics
Rodríguez- Figueroa, Linnette	Professor	T	B.S. M.S. Ph.D	University of Puerto Rico University of Puerto Rico University of Michigan	Biology Epidemiology Epidemiological Sciences	Epidemiology

TABLE E1.1. GSPH Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classification^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
Nazario-Delgado, Cruz M.	Professor	T	B.A. M.S. Ph.D.	University of Puerto Rico University of Puerto Rico Johns Hopkins University	Health Physics Epidemiology	Epidemiology
Reyes-Pulliza, Juan C.	Professor	T	B.S. M.S. Ed.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Biology Epidemiology Education	Epidemiology
Pérez-Cardona, Cynthia M.	Professor	T	B.S. M.S. Ph.D.	University of Sacred Heart Purdue University Purdue University	Mathematics Statistics Epidemiology	Epidemiology
Rosario-Rosado, Rosa V.	Professor	T	B.S. M.S. DrPH.	University of Puerto Rico University of Puerto Rico University of North Texas Health Science Center	Natural Sciences Epidemiology Epidemiology	Epidemiology
Borges-Cancel, María T.	Associate Professor	TT	B.H.E., M.P.H.E. EdD	University of Puerto Rico University of Puerto Rico Interamerican University	Community Health Educ Public Health Education Education- Curriculum	Public Health Education
Colón-Colón, Marcilyn	Associate Professor	NT	B.H.E. M.P.H. M.A. EdD	University of Puerto Rico University of North Carolina University of Puerto Rico University of Puerto Rico	Community Health Educ. Health Behavior & H. Ed. Communication Theory Education - Leadership	Public Health Education
Gely-Rodriguez, Daisy M.	Professor	T	B.A. M.P.H.E	University of Puerto Rico University of Puerto Rico	Social Sciences Health Education	Public Health Education
Rabionet- Sabater, Silvia E.	Professor	T	B.A. M.A. Ed.D.	Mount Holyoke College Harvard University Harvard University	Psychology and Educ. Education Education	Public Health Education

TABLE E1.1. GSPH Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classification^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
García-Meléndez, Ivelisse M.	Professor	T	B.S. M.S. Ed.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Science Evaluation Research Curriculum and Instruction	Public Health Education
Carrión-Baralt, José R	Professor	T	B.S. M.S. M.S. M.P.H. Ph.D.	University of Michigan University of Michigan Universidad Pablo de Olavide Universidad de Puerto Rico Caribb. Center for Adv. Stud.	Engineering Mechanical Engineering Neuroscience & Behavior Epidemiology Clinical Psychology	Gerontology
Labault-Cabeza, Nirzka M.	Professor	T	B.S.Ph. M.S. M.P.H. Ph.D.	University of Puerto Rico, University of Massachusetts	Pharmaceutical Sciences Gerontology	Gerontology
Ruiz-Cora, Edgardo	Associate Professor	T	B.A. M.P.H. Ph.D.	University of Puerto Rico University of Pittsburgh University of Pittsburgh	Anthropology Behav & Comm. Health Medical Anthropology	Gerontology
Ríos-Motta, Ruth E.	Professor	T	B.S. M.S. Ph.D.	University of Puerto Rico University of Puerto Rico Johns Hopkins University	Biology, Health Systems Evaluation Research, Health Policy, Health Services Research and Evaluation	Health Systems Analysis and Management
Marín-Centeno, Heriberto A	Professor	T	B.A. M.A. Ph.D.	University of Puerto Rico Wayne State University Wayne State University	Economics; Economics Development and Labor Economics	Health Systems Analysis and Management

TABLE E1.1. GSPH Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classification^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
Ramírez-García, Roberto	Professor	T	B.B.A. M.H.S.A. Ph.D.	University of Puerto Rico Boston University	Health Policy; Accounting	Health Systems Analysis and Management
Arroyo-Acevedo, Hiram V.	Professor	T	B.S. M.P.H.E. Ed.D.	University of Puerto Rico University of Puerto Rico Interamerican University	Education Comm. Health Public Health Education Education- Plann. & Eval.	Social Determinants of Health
Vélez-Vega, Carmen M.	Professor	T	BA B.S.W. M.S.W. Ph.D.	University of Puerto Rico Florida State University Florida State University University of Puerto Rico	Psychology Social Work Clinical Social Work Social Policy Research	Social Determinants of Health
Rivera-Díaz, Marinilda	Assistant Professor	NT	B.S.W. M.S.W. Ph.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Social Work – Policy Social Work- Child Welfare Social Work	Social Determinants of Health
Bustillo- Hernández, Marta	Associate Professor	T	B.A. M.A.Ph.D.	University of Puerto Rico University of Florida, Gainesville	Sociology; Public Health and Community Health	Social Determinants of Health
Pérez-Díaz, José M.	Associate Professor	T	B.S. M.B.A. Ph.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Applied Mathematics Business Administration Business Adm. - Finance	Health Services Administration
Torres-Zeno, Roberto E.	Professor	T	B.A. M.P. Ph.D.	University of Puerto Rico University of Michigan	Social and Technological Planning; Political Sciences	Health Services Administration
Vázquez-Torres, Dharma	Professor	T	B.S. M.H.S.A. Ph.D.	University of Puerto Rico Walden University Walden University	Health Services Administration; Sciences	Health Services Administration
Capriles-Quirós, José A.	Professor	T	B.S. M.D. C.P.U.M	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Biology; Pediatrics - Medicine; Dev. Disabilities;	Health Services Administration

TABLE E1.1. GSPH Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classification^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
			M.P.H. M.H.S.A.	University of Puerto Rico University of Puerto Rico	Maternal and Child Health Health Services Adm.	
Albizu-García, Carmen E.	Professor	T	B.A. M.D	University of Puerto Rico University of Puerto Rico	Zoology Pediatrics	Evaluation Research
Clatts, Michael C.	Professor	T	B.A. M.A. Ph.D.	University of Maryland Stony Brook University	Anthropology /Philosophy; Anthropology	Evaluation Research
Colón-Jordán, Héctor	Associate Professor	TT	B.A. M.A. Ph.D.	New York University Universidad Nacional Autónoma de México University of Miami	Sociology/Mathematics- Computers; Sociology; Epidemiology	Evaluation Research
Caporali-Filho, Sergio A.	Professor	T	B.S. M.E. M.S. Ph.D.	University of Lima of Peru University of Puerto Rico West Virginia University West Virginia University	Industrial Engineering; Manufacturing Systems Engr Occupational Hygiene & Occupational Safety; Industrial Engineering-Ergonomics	Industrial Hygiene
Orta-Anés, Lida	Professor	T	B.S. M.P. M.A. Ph.D.	University of Puerto Rico University of Puerto Rico University of Michigan University of Michigan	General Sciences Social Planning Organizational Psychology Socio-Technological Planning-Engineering Management-Ergonomics	Industrial Hygiene
Pimenta Oliveira, Aluisio	Assistant Professor	TT	B.A. M.S. Ph.D.	University of Maryland University of Maryland Rensselaer Polytechnic Institute	Science Environmental Engineering Chemical Engineering	Industrial Hygiene

TABLE E1.1. GSPH Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classification^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
Parrilla- Rodríguez, Ana M.	Professor	T	B.S. M.P.H. M.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	General Sciences Maternal and Child Health Medicine	Maternal and Child Health
Salas, Carol	Assistant Professor	NT	B.A. Psy.D.	University of Puerto Rico Carlos Albizu University	Psychology Clinical Psychology	Developmental Disabilities
Rivera-Soto, Winna	Professor	T	B.S. M.P.H. Ph.D.	University of Puerto Rico University of Puerto Rico Cornell University	Nutrition and Dietetics Public Health Community Nutrition	Nutrition
González- Guzmán, Michael J.	Professor	T	B.S. M.S. M.H.S.N. Ph.D.	Catholic University of PR Nova College University of Puerto Rico Michigan State University	Biology and Chemistry Cell Biology, Genetics and Nutrition Human Nutrition	Nutrition
Dávila-Román, Ana L.	Professor	T	B.A. M.A. Ph.D.	University of Puerto Rico University of Puerto Rico Université de Paris, France	Economics and Sociology Urban and Econ. Planning Demography	Demography
León-López, Luz E.	Professor	T	B.A. M.S. Ph.D.	University of Puerto Rico Fordham University	Social Sciences. Demography Sociology	Demography
Mattei-Torres, Hernando A.	Professor	T	B.A. M.A. Ph.D.	University of Puerto Rico Brown University, Rhode Island University of Texas	Sociology; Population Studies; Linguistics	Demography

- 2) Provide summary data on the qualifications of any other faculty with significant involvement in the school or program's public health instruction in the format of Template E1-2. Schools and programs define "significant" in their own contexts but, at a minimum, include any individuals who regularly provide instruction or supervision for required courses and other experiences listed in the criterion on Curriculum. Reporting on individuals who supervise individual students' practice experience (preceptors, etc.) is not required. The identification of instructional areas must correspond to the data presented in Template C2-1. (self-study document)

TABLE E1.2. GSPH Non-Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021						
Name*	Title/ Academic Rank	Tenure Status or Classification [^]	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
M.Arrero-Hernández, Álida R.	Adjunct Professor	NT	B.S. M.P.H.	University of Puerto Rico University of Puerto Rico	Natural Sciences Gerontology	Gerontology
Rosich Bachs, Walter	Adjunct Professor	NT	B.A. M.D. Certificate	University of Puerto Rico Univ. Santiago de Compostela University of Puerto Rico	Pre-Medicine Medicine Gerontology	Gerontology
Rivera Torres, Gerardo	Adjunct Professor	NT	B.A. M.P.H. M.S. Psy.D.	University of Puerto Rico University of Puerto Rico Carlos Albizu University Carlos Albizu University	Sociology & Psychology Gerontology Clinical Psychology Clinical Psychology	Gerontology
Ortiz Ortiz, Karen J.	Adjunct Professor	NT	Dr.PH	University of Puerto Rico	Public Health	Health Systems Analysis and Management
Oton Olivieri, Patricia	Adjunct Professor	NT	B.A. M.P.H.E. J.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Social Sciences Public Health Education Juris Doctor	Health System Analysis and Management

TABLE E1.2. GSPH Non-Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classification^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
			L.L.M.	University of Toronto	Master of Laws	
Colón Pérez, Iván	Adjunct Professor	NT	B.S. M.H.S.A.	University of Puerto Rico University of Puerto Rico	Science Health Services Administration	Health Services Administration
González Avilés, Gilberto	Adjunct Professor	NT	B.A. M.B.A. M.H.A D.B.A. Dr.PH.	University of Puerto Rico Sacred Heart University Universidad del Turabo University of Puerto Rico	Computer Mathematics General Management Health System Analysis and Management	Health Services Administration
Hernández Rivera, Griselle	Adjunct Professor	NT	B.S. M.H.S.A. J.D.	University of Puerto Rico University of Puerto Rico Interamerican University	Science Health Services Administration Law	Health Services Administration
Rodríguez Sánchez, Mario H.	Professor	T	B.S. M.S. M.P.H. M.S. Ph.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico Carlos Albizu University Carlos Albizu University	Pre-med Environmental Health Epidemiology Industrial Organizational Psychology	Health Services Administration
Meléndez Cintrón, Luis	Adjunct Professor	NT	B.A. J.D. M.H.S.A	University of Puerto Rico Pontifical Catholic University Puerto Rico University of Puerto Rico	Education Law Health Services Administration Education	Health Services Administration MPH-General Option
Ortiz Martínez, Ana P.	Professor	NT	B.S. M.P.H.	University of Puerto Rico	Biology Epidemiology	Epidemiology

TABLE E1.2. GSPH Non-Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classificat ion^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
			Ph.D.	University of Michigan, Ann Arbor University of Michigan, Ann Arbor	Epidemiology	
Príncipe Pabellón, Brunilda	Professor	NT	B.A. M.S. M.A.	University of Puerto Rico University of Puerto Rico University of Phoenix	Pedagogy in Biology Epidemiology Education-Curriculum	Epidemiology
Torres Cintrón, Mariela	Adjunct Professor	NT	B.S. M.S. Dr.PH.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Health Systems Analysis Epidemiology General Sciences	Epidemiology Biostatistics
Serrano Padilla, Deborah	Adjunct Professor	NT	B.H.E M.P.H.E. Ed.D	University of Puerto Rico University of Puerto Rico Inter American University	Health Education Public Health Education Education - Curriculum	Public Health Education
Rodríguez Madera, Sheilla L.	Adjunct Professor	NT	B.A. M.A. Ph.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Psychology Clinical Psychology Psychology	Social Determinants of Health
Flores-Rivera, Efraín	Librarian V	T	B.A. M.S. Ed.D	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Education Library Science Education	Social Determinants of Health
Pérez Vázquez, Carmen M.	Adjunct Professor	NT	B.S. M.H.S.N. Dr.PH	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Nutrition and Dietetics Nutrition Social Det. of Health	Environmental Health
Vega Alejandro, Ricardo	Adjunct Professor	NT	Doctorate (MD)	Medicine, Universidad Central del Este, Dominican Republic	Doctorate (MD)	Industrial Hygiene
Pagán Medina, Ileana		NT	B.A. Psy.D	University of Puerto Rico Carlos Albizu University	Psychology, Clinical Psychology	Developmental Disabilities

TABLE E1.2. GSPH Non-Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classificat ion^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
Alonso Amador, Annie	Professor	T	B.A. M.S.W. M.S. Psy.D	University of Puerto Rico University of Puerto Rico Centro Caribeño Est. Postgrad Centro Caribeño Est. Postgrad	Sociology Social Work Clinical Psychology Clinical Psychology	Developmental Disabilities
Arguelles Morales, Mercedes	Adjunct Professor	NT	B.S. M.A. Ph.D.	University of Puerto Rico University of Puerto Rico University of Arizona	Nutrition and Dietetics	Nutrition
Berrios Carrasquillo, Chiara	Adjunct Professor	NT	B.S. M.D. M.H.S.A.	Pontifical Catholic University of Puerto Rico Autonomous University of Guadalajara Georgetown University Graduate School	Biology Medicine Health Systems. Administration	Health Services Administration
Clas Fernández, Luis V.	Adjunct Professor	NT	B.A. M.D. M.P.H. M.H.S.A..	University of Puerto Rico Central East University University of Puerto Rico University of Puerto Rico	Pre-Medicine Medicine Public Health, Child and Mothers Health Services Administration	Health Services Administration
Estremera De Jesús, Luis E.	Instructor	NT	B.A. M.P.H.E. Ed.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Health Education Public Health Education	Public Health Education

TABLE E1.2. GSPH Non-Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classification^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
					Learning & Curriculum, Instructional Technology Specialty	
Negron Ayala, Juan L.	Adjunct Professor		B.A. M.P.H. Ph.D.	University of Puerto Rico University of Puerto Rico University of Pennsylvania	Medical Anthropology Biostatistics Anthropology	Social Determinants of Health
De Jesús Monge, Vivianna M.	Adjunct Professor	NT	B.A. M.S. Ph.D.	University of Puerto Rico University of Puerto Rico Universidad de Salamanca	Sociology Demography Social Anthropology	Demography
Bidot San Antonio, María E.	Professor	T	B.S. M.P.H.E. Ed.D.	University of Puerto Rico University of Puerto Rico Interamerican University	Education Public Health Education Home Economics	Public Health Education
Acosta Rodriguez, Angeles J.	Adjunct Professor	NT	B.A. M.A. M.S. Psy.D	University of Puerto Rico Central University of Barcelona Caribbean Center for Advanced Studies	Psychology General Psychology Clinical Psychology	Developmental Disabilities
Caraballo Correa, Glorimar	Adjunct Professor	NT	B.S. M.S. Ph.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Health Services Evaluation and Research, Administration and Analysis of Social Policies	Evaluation Research
Malave Rivera, Souhail M.	Adjunct Professor	NT	B.A. Ph.D.	University of Puerto Rico University of Puerto Rico University of California	Psychology Social-Community AIDS Prevention Studies	Social Determinants of Health

TABLE E1.2. GSPH Non-Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classificat ion^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
			Postdoctoral Fellowship			
Vallés-Ramos, Emma. J.	Assistant Professor	T	B.S. M.H.S.N. Certificate	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Nutrition & Dietetics Nutrition Gerontology, Geriatrics	Nutrition
Berdecia Garcia, Rafael	Assistant Professor	T	B.S. BB.A.	University of Puerto Rico University of Puerto Rico	PharM.A.cy, Statistics	Biostatistics
Torres-Castro, Heriberto	Professor Emeritus	Ad Honorem	Ph.D.	Purdue University	Radiological Health	Environmental Health
Soto de Laurido, Lourdes E.	Professor	T	B.A. M.P.H.E. Ed.D.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Biology Health Education Curriculum Teaching Bioethics, Health Disparities, Determinants Health	MPH-General Option
Millán-Pérez, Liza I.	Adjunct Professor	NT	B.A. M.S. Ph.D.	University of Puerto Rico Carlos Albizu University Carlos Albizu University	Psychology Clinical Psychology Clinical Psychology	MPH-General Option
Soto Salgado, Marievelisse	Adjunct Professor	NT	B.S. M.S. Dr.PH.	University of Puerto Rico University of Puerto Rico University of Puerto Rico	Science Epidemiology Social Determinants of Health	Epidemiology
Reyes-Medina, María N.	Adjunct Professor	NT	B.A. M.S.W	University of Puerto Rico University of Puerto Rico	Sociology Social Work	Developmental Disabilities
Noboa Ramos, Carlamarie	Adjunct Professor	NT	B.S. M.S.	University of Puerto Rico University of Puerto Rico	General Science	Evaluation Research

TABLE E1.2. GSPH Non-Primary Instructional Faculty Alignment with Degrees Offered, AY 2020-2021

Name*	Title/ Academic Rank	Tenure Status or Classificat ion^	Graduate Degrees Earned	Institution(s) from which degree(s) were earned	Discipline in which degrees were earned	Concentration affiliated with in Table C2-1
			Ph.D.	Walden University	Health Systems. Evaluation Research with Minor in Biostatistics Epidemiology	
Vazquez, Yiselly	Adjunct Professor	NT	B.A. MPHE PhD Certificate	University of Puerto Rico University of Puerto Rico University of Puerto Rico University of Puerto Rico	Special Education Public Health Education Educational Leadership Gerontology	Gerontology

3) Include CVs for all individuals listed in the templates above. (electronic resource file)

Faculty CV's available in **Electronic Resource File E1.3.**

4) If applicable, provide a narrative explanation that supplements reviewers' understanding of data in the templates. (self-study document)

The GSPH has a diverse complement of faculty that covers a wide variety of disciplines and professions from public health, the social sciences, medicine, administration, and Law, among others. The GSPH faculty's diverse areas of training and expertise allow for the integration of interprofessional and interdisciplinary approaches across the curriculum and allows the School to meet the diverse interests of students. Non-primary instructional faculty expand this diversity and adds researchers, public health practitioners and other expertise to educational offerings. Both, primary instructional faculty, as well as non-primary instructional faculty have accomplished the top academic degrees expected from a highly qualified school of public health. Their academic background as well as the universities from where their degrees were obtained allows for a variety of perspectives which has a positive impact on the curriculum and the students' educational experience.

5) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The school maintains a faculty with the expected qualifications, diverse backgrounds and experiences in public health to fully support the school's mission, goals, objectives, and multidisciplinary academic offerings.
- Our faculty has a diverse and complementary educational background from Puerto Rican, Latin American, European and North American Universities.
- The faculty interdisciplinary educational background strengthens the School's approach to public health.

Weaknesses

- A high proportion of very senior faculty are eligible for retirement and may impact the experience in the complement of faculty in the near future.
- Some primary instructional faculty and many non-primary instructional faculty with significant involvement in the school's public health instruction, are non-tenured and/or adjunct professors.

Lessons Learned

- The school must retain sufficient multidisciplinary and diverse faculty member to continue its mission in teaching, research and service.
- A viable faculty succession plan must be developed and implemented to ensure continued success.

E2. INTEGRATION OF FACULTY WITH PRACTICE EXPERIENCE

To assure a broad public health perspective, the school or program employs faculty who have professional experience in settings outside of academia and have demonstrated competence in public health practice. Schools and programs encourage faculty to maintain ongoing practice links with public health agencies, especially at state and local levels. To assure the relevance of curricula and individual learning experiences to current and future practice needs and opportunities, schools and programs regularly involve public health practitioners and other individuals involved in public health work through arrangements that may include adjunct and part-time faculty appointments, guest lectures, involvement in committee work, mentoring students, etc.

- 1) Describe the manner in which the public health faculty complement integrates perspectives from the field of practice, including information on appointment tracks for practitioners, if applicable. Faculty with significant practice experience outside of that which is typically associated with an academic career should also be identified. (self-study document)**

The GSPH faculty integrates perspectives from the field of practice through: (1) practicums required in degree programs at the master's and doctoral level, (2) networking and collaborations with public health sites and practitioners, (3) community-based research conducted by faculty members throughout Puerto Rico and beyond, (4) consultation and service provided by the faculty to government and non-government agencies locally, nationally, and internationally, (5) primary-instructional faculty (PIF) with prior public health practice experience, and (6) Adjunct faculty with public health practice experience.

Practicums and other Curricular Activities - The faculty integrates its extensive experiences in public health and community outreach in practice activities of academic programs. Some programs require an internship or residency experience as an essential experience for the completion of their degrees. These activities are carried out in part because of the faculty's broad network of contacts and collaborations with public health practitioners and organizations. The following programs use this model: All DrPH programs, MPH-Environmental Health, MPH-Public Health Education, MHSA- Health Services Administration, MS-Industrial Hygiene, and the Graduate Certificate in Gerontology. Other programs have practice experiences which are embedded in community organizations in Puerto Rico that are seeking the assistance of the GSPH to evaluate a public health issue. These activities also benefit from and expand faculty networks and agreements. The programs that use this model are: MPH-Biostatistics, MPH-Epidemiology, MPH-Gerontology, MPH-General Option, MS-Demography, Development Disabilities Certificate (See Criteria D5 and D6 for more information on MPH and DrPH practice experiences).

Networking and Collaborations with public health sites and practitioners -The GSPH has collaborative agreements with a network of government agencies, private institutions and community-based organizations for research, service, and instruction (many of which serve as practice sites). These collaborations require close relationships with public health practice sites and practitioners. For example, the *Puerto Rico Geriatric Workforce Enhancement Program* from the GSPH has collaborations with COSSMA's Federally Qualified Health Centers, and as part of its activities they are assisting public health practitioners in the integration of Age-friendly Health Care principles in their primary care centers. This collaboration involves faculty's continuous interaction with case managers, health education specialists, social workers, health services administrators, clinicians, health services evaluators and others. Collaborations such as these keep faculty grounded in the challenges, needs, and organizational/community capacity in current public health practice sites. The Institute on Developmental

Disabilities' Child Development Center is another example of initiatives with a wide range of collaborations and contacts with practitioners. It is a laboratory center that helps children develop abilities and potential for successful societal integration. In fulfilling this goal practitioners such as social workers, therapists and others are in constant interaction with faculty thereby sharing their perspectives. These are just two examples from the School. The following list presents a sample list by category of organizations with collaborative agreements with the school where these networking and collaborative experiences take place:

- Government Agencies: Department of Health – multiple divisions; Municipality of San Juan; Municipality of Caguas
- Primary Health Centers: *Salud Integral de la Montaña*; COSSMA; *Concilio Integral de Loíza*
- Hospitals: Pediatric Hospital of Medical Center; Metropolitan Hospital; Pavia Health
- Community Based Organizations: *Movimiento Alcance Vida Independiente*; *Taller Salud*; *Comité Pro Vejez de Aibonito*
- Other Organizations: World Health Organization; *Asociación Puertorriqueña de Diabetes*; *Consortio Interamericano de Universidades y Centros de Formación de Personal en Educación para la Salud y Promoción de la Salud (CIUEPS)*

Community-based Research Projects - The GSPH's portfolio of research has applied components with close ties with public health practice and practitioners. Many of these projects involve population-based data collection within a community setting by GSPH faculty, researchers or students; community outreach activities; and community engagement. These community research activities bring practitioners perspectives to faculty and students. For example, the Community Engagement Core of the Puerto Rico Testsite for Exploring Contaminations Threats (PROTECT), has established relationships with a wide range of community social actors, including staff and clinicians at community health centers, social work and nursing staff, and other community groups. Part of PROTECT's goals are: to develop a communication strategy to report the results of research to stakeholders; implement capacity-building for participants and their community organizations; and develop resources for early childhood development through interventions that support preterm children born to participants. This is just one example of a community-based research project in the GSPH that integrates perspectives from public health practice.

Consultation, Advisory and Service in Public Health Practice - Faculty members routinely serve as consultants or advisors to public health projects and initiatives in government agencies, community-based organizations, hospitals, and industrial settings. They also serve on boards of public health and health services organizations and make presentations to the Puerto Rico legislature on public health issues. In these advisory and consultation roles faculty remain grounded in practice experiences. Some examples of Faculty members as advisors, consultants or members of directing boards for different organizations are provided from Academic Year 2019-2020:

- Puerto Rico Department of Health: Dr. Ruth Rios, Dr. Ana Luis Dávila, Dr. Ana Parrilla, Dr. Gilberto Ramos Valencia, Dr. Juan C. Reyes-Pulliza, Dr. Istoni Da'Luz, Dr. Linnette Rodríguez Figueroa, Dr. Erick Suárez, Dr. Heriberto Marín, Dr. Cynthia M. Pérez Cardona, Dr. Hernando Mattei, Dr. José Pérez Díaz
- *Proyecto Enlace*, Advising Board: Dra. Cruz M. Nazario
- *Comité Interagencial Proveez Aibonito*: Dr. Nirzka Labault, Dr. Linnette Rodríguez
- *Administración de Servicios de Salud Mental y Contra la Adicción (ASSMCA)*: Dr. Linnette Rodríguez
- Puerto Rico Planning Board: Dra. Ana Luis Dávila
- Puerto Rico Department of Family Affairs: Dra. Luz León López

- Puerto Rico Senate (Commission of Health, Commission of Environmental Health and Natural Resources): Dr. Roberto Ramírez, Dr. Luis A. Bonilla Soto, Dr. José Seguinot Barbosa
- Pan-American Health Organization: Dr. Hiram Arroyo
- American Heart Association in Puerto Rico: Dr. Marcilyn Colón Colón
- *Coalición para la Lactancia Materna en Puerto Rico*: Dr. Ana Parrilla
- International Baby Food Action Network (IBFAN): Dra. Ana Parrilla
- Puerto Rico Committee of Experts and Advisors on Climate Change: Dr. Pablo Méndez Lázaro
- Medical Task Force for COVID-19: Dr. Juan C. Reyes Pulliza, Dr. Cynthia M. Pérez Cardona, Dr. Dharma Vázquez, Dr. Heriberto Marín Centeno
- *Corporación de Servicios de Salud Primaria y Desarrollo Socioeconómico El Otoao*: Dr. Ralph Rivera Gutiérrez, Dr. Heriberto Marín Centeno
- *Centro de Apoyo Mutuo y Resiliencia Comunitaria Las Carolinas* (Caguas): Dr. Ralph Rivera Gutiérrez, Dr. Heriberto Marín Centeno

Primary Instructional Faculty with Prior Public Health Practice Experience: Some of our PIF have prior experience as public health practitioners. This experience contributes to the formation of our students. The following list provides some examples from our PIF:

- Dr. Rosa Rosario - prior experience as field epidemiologist and special program coordinator for the Puerto Rico Department of Health.
- Prof. Daisy Gely – prior experience as health educator in the Department of Health and Health Services Administrator in a Head Start Program.
- Dr. Marinilda Rivera – prior experience as project director in child and adolescent mental health Initiatives for the Mental Health and Anti-Addiction Services Administration.
- Dr. Winna Rivera – prior experience as public health nutritionist for the Department of Health and nutrition specialist for the Puerto Rico Cooperative Extension Service.
- Dr. Juan C. Reyes – prior experience as researcher in the Mental Health and Anti-Addiction Services Administration, Puerto Rico Department of Health.
- Dr. Marisol Peña – prior experience as Co-Principal Investigator, associate director and project director for the Center for Public Health Preparedness and as an epidemiologist contractor and educational consultant for the Center for Disease Control and Prevention’s Division of Vector-Borne Infectious Diseases - Dengue Branch of Puerto Rico.
- Dr. Ruth Rios – prior experience as evaluator for the Center for HIV Education and Research at University of South Florida.
- Dr. Cruz M. Nazario – previous experience as epidemiologist at the National Cancer Institute; project director in the Adolescent Health Project, funded by the Robert Wood Johnson Foundation, at the Puerto Rico Community Foundation.
- Dr. Ana P. Ortiz – prior experience as associate director of epidemiology in the Division of Cancer Control and Population Sciences at University of Puerto Rico Comprehensive Cancer Center
- Dr. Linnette Rodriguez – prior experience as investigator in the Anti-Addiction and Mental Health Services Administration (ASSMCA)
- Dr. Ana L. Davila – prior experience as demographer at Centro Nacional para la Investigación Científica.
- Dr. Rosa E. Marchand – prior experience as research associate in the HIV/AIDS Research and Educational Center at University of Puerto Rico.
- Dr. Luis A. Bonilla- previous experience as a senior scientific advisor for environmental and public health problems in the Office of Legislative Services at Capitol Building in San Juan, PR.

- Dr. Roberto E. Torres-Zeno - prior experience as health planner specialist in the Office of Planning, Statistics and Evaluation of the Health Department of the Municipality of San Juan.

Adjunct Faculty with Public Health Practice Experience: The GSPH recruits adjunct and part-time faculty with practice experience. Adjunct faculty are involved in teaching courses, and participate as guest lecturers, thesis mentors, research collaborators, and community-based organization liaisons to bring their public health practice experience to the curriculum. The following list provides some examples from our Adjunct and part-time faculty:

- Dr. Deborah Serrano Padilla is currently an institutional educator and formerly a health educator and asthma instructor for the San Jorge's Children & Women's Hospital.
- Dr. Gilberto González has prior experience as deputy director in the Health Department of the Municipality of San Juan and as executive director in various hospitals.
- Dr. Luis Clas is currently corporate medical director of Metro Pavia Clinic and has been medical director/manager of *Salud Integral de la Montaña*.
- Dr. Walter Rosich Bachs has vast experience working with older adults in his medical private practice and as a medical advisor for gerontological affairs for numerous public and private institutions.
- Lic. Chiara Berrios has led compliance work in many healthcare organizations in Puerto Rico and USA.
- Dr. Carlos E. Rodríguez-Díaz has prior experience as a health education and promotion consultant in the Correctional Health Services Administration.
- Dr. Mariela Torres-Cintrón is currently a health system analyses consultant at the Hispanic Alliance for Clinical and Translational Research and a former epidemiologist at the Auxiliary Secretariat for Health Promotion in the Department of Health of Puerto Rico.
- Dr. Carmen M. Pérez-Velázquez has prior experience as clinical dietitian at the University of Puerto Rico Dr. Federico Trilla Hospital, and as nutritionist in the WIC Program and the El Nuevo Amanecer Hospice & Nutrivanche-Echmart Home Care.
- Dr. Carlamarie Noboa is currently an evaluation task group director of the Telemedicine Program for Puerto Rico Coronavirus Relief Fund (CRF) Grant Program.
- Lic. Griselle Hernández has prior experience as executive director at *Hospital de Psiquiatría General Dr. Ramón Fdez. Marina*.
- Sr. Ivan E. Colón has vast experience in health services administration.
- Dr. Yiselly M. Vazquez is currently working as health educator for the Puerto Rico Health Department and has prior experience as a health education coordinator in the PR Affiliate of Susan G. Komen for the Cure.

In summary, the GSPH leverages teaching, research, and service opportunities to integrate the perspective of public health practitioners into school activities and curricula. The GSPH incorporates faculty with different backgrounds, including those with experience in public health practice and other nonacademic areas which enrich the expertise and experience available to students.

2) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- Faculty is engaged in a variety of activities with community, local government and other agencies that conduct public health work. These experiences enrich teaching and mentoring relationships with students, as well as their research.

Weaknesses

- Due to issues related to fiscal concerns the focus of the GSPH has centered on recruiting faculty with research backgrounds to increase external funding. This focus has led the GSPH to not set a high priority on recruiting primary and supporting faculty based on their practice experience.

Lessons Learned

- It is important to develop more opportunities to integrate public health practitioners formally as external advisors to keep the curriculum updated according to current and future public health practice needs and opportunities. The school recently created an External Advisory Board to address this.

E3. FACULTY INSTRUCTIONAL EFFECTIVENESS

The school or program ensures that systems, policies, and procedures are in place to document that all faculty (full-time and part-time) are current in their areas of instructional responsibility and in pedagogical methods. The school or program establishes and consistently applies procedures for evaluating faculty competence and performance in instruction. The school or program supports professional development and advancement in instructional effectiveness.

- 1) **Describe the means through which the school or program ensures that faculty are informed and maintain currency in their areas of instructional responsibility. The description must address both primary instructional and non-primary instructional faculty and should provide examples as relevant. (self-study document)**

Faculty have ample opportunities to remain current in their disciplinary, topical, and methodological areas of teaching, service, and research responsibility. These opportunities are available at the campus, school, department, and individual levels. UPR regulations promote faculty development through strategies such as: sabbaticals, financial aid, leave of absence to study, continuing education activities, travel funds, tuition exemption, and time to attend courses offered within the UPR System.

At the Medical Sciences Campus level, the Deanship of Academic Affairs is charged with the responsibility of overseeing academic processes that pertains to all schools, including continuing education, faculty development, and coordination of interdisciplinary activities. Faculty have multiple opportunities and mechanisms for professional development and support. Among the faculty development resources in the MSC are: The Faculty Resource Network, the Research Centers in Minority Institutions Program (RCMI), the Office for Research and Development, and the Title V Program. Faculty from the GSPH have participated in activities from all these sources. Research and service centers in the MSC such as the Hispanic Alliance for Translational Research provide webinars, guest speaker lectures and other activities that provide faculty an opportunity to keep current in research and health related topics. The six schools and various academic programs of the MSC also organize lectures, webinars and other activities that are open to the academic community and may be relevant to faculty research interests and areas of teaching responsibility. The MSC also has a Central Division for Continuing Education and Professional Studies that offer continuing education activities and continuing education credits for all health professions. For example, during the beginning of the covid pandemic, the continuing education division of the MSC in conjunction with the RCM Online Division prepared a continuing education online module with the latest scientific information and guidelines for health professionals. This module was available to all faculty. This example shows the MSC's commitment to meeting faculty and health professional's needs in staying current with emerging public health issues.

The MSC's also organizes an annual Research and Education Forum which provides faculty and students not only with an opportunity to present their research and innovative education initiatives, but also to learn about the latest research, practice, and education initiatives from across the whole spectrum of health professions and sciences across all campus schools. The GSPH has a representative in the event's organizing committee which helps insure the inclusion of public health topics, and faculty and student participation from the school. Local, national and international keynote and guest speakers in the MSC Research and Education Forum provide opportunities to learn about pressing public health issues and the latest research and practice trends. The MSC Research and Education Forum is open to PIF and Non-PIF faculty, students, alumni, and the community at large.

The GSPH organizes talks, lectures, roundtable discussions and other public health activities of current public health issues, trends, interventions, and policy. These activities may be coordinated by programs, departments, service and research centers and projects, or student associations. These activities involve faculty, guest speakers from community or professional organizations, and other sectors relevant to public health disciplines and issues. An example of a service center's contribution is the GSPH's WHO Collaborating Center for Training and Research in Health Promotion and Health Education which coordinates various activities every year with other national and international organizations on current public health issues and approaches, leveraging partnerships and relationships with international experts and organizations. In AY 2020-2021 it coordinated 11 activities on topics such as: the healthy settings approach, the healthy cities initiative, challenges of health promotion in Latin America, human rights, health promoting universities model, and the health promoting municipalities model, among other topics. Another example is a series of talks coordinated by the GSPH to commemorate the 50th anniversary of the school during AY 2020-2021 with activities (10 at the time of writing) in topics such as: the history of public health in Puerto Rico, health promotion in schools, social medicine in Latin America, health promotion in the Puerto Rico health industry, and a recent activity about globalization and the health of migrant children (which included speakers from Puerto Rico and El Salvador). Another recent example is an activity coordinated to celebrate the 10 year anniversary of the Social Determinants of Health Program with a webinar about critical health research with speakers from Argentina and Brazil. All these activities are open to all faculty (both PIF and Non-PIF), students, alumni, and the rest of the academic community. The GSPH disseminates campus and school activities, along with national and international professional development opportunities from outside the school through the sp_informa@rcm.upr.edu listserve, which reaches all faculty, students, alumni, and the academic community at large (refer to **Electronic Resource File E3.1** for examples of activities disseminated through SP-Informa listserve).

Faculty may also request department support for training activities which are aligned with the department and GSPH priorities. Department chairpersons and the Dean may also recommend faculty representatives to attend specific activities, according to institutional and individual academic goals. At the individual level, faculty are encouraged to participate in continuing education and professional development activities. In order to comply with local laws, all health professionals must complete a specified number of continuing education credits yearly to renew licensure. Faculty are encouraged to attend continuing education activities to remain current in their professions.

Other opportunities for faculty development include attendance at professional meetings, seminars, and workshops. Department funds are available to support faculty travel for professional development to meetings, and cover registration, hotel or housing arrangements, transportation, and other expenses. Primary and non-primary faculty members have participated in professional meetings annually. Many GSPH faculty members attended professional conferences and seminars utilizing funds from their service or research grants.

Information about faculty participation in activities that maintain currency in their areas of teaching, research and service responsibility are gathered each semester in each academic department's semester report. Each faculty member reports its activities in different areas related to the school's strategic plan and other important assessment indicators. The information provided includes participation in continuing education activities, professional conferences trips and other professional development information among other key indicator information. Information provided by each faculty member is compiled in each department's semester report. The Office of the Dean receives these departmental reports for the GSPH annual report. Faculty currency is also assessed in faculty evaluations for tenure and promotion.

2) Describe the school or program's procedures for evaluating faculty instructional effectiveness. Include a description of the processes used for student course evaluations and peer evaluations, if applicable. (self-study document)

The GSPH evaluates its faculty instructional effectiveness by different procedures. All courses at the School are evaluated by students. Academic Senate Certification 057, 2010-2011, titled "Student Perception of Professor Performance in the Course" establishes that student course evaluations are mandatory as part of faculty evaluations for promotion and tenure. The MSC's standard student evaluation questionnaire evaluates faculty performance. The GSPH adapted the questionnaire by adding two sections on course structure and learning materials, and student impact, to better measure instructional effectiveness and the relevance of these areas to student learning (**Electronic Resource File E3.2.a - Evaluation Questionnaire**).

Since AY 2019-2020 the School's Office of Curriculum and Evaluation (OCE, for Spanish acronym) has requested to the Registrar a list of students by course section with their emails in order to send a link to the course and faculty evaluation instrument to students at the end of each trimester. The office gives students ten days to complete the assessment, with a reminder on day 3. Students rate faculty performance in courses using a 4-single item Likert scale. They are also allowed to express their views of the course and faculty performance in an open-ended comment section. The OCE generates mean scores for each area and by items. The areas measured are: performance of the faculty, practice supervision performance (if applicable), assigned materials used, and impact on the student. The report also includes student observations and comments. Response rate for these evaluations were 32% during the last academic year. Student evaluations are made available to faculty. If there are concerns program coordinators and department chairpersons can review student evaluations to establish a plan for improvement.

MSC policies promote excellence in teaching, research, and service. Moreover, primary instructional faculty effectiveness is evaluated at the program and department level during reviews for promotion and tenure. The MSC evaluation system is affirmed in Certification 057, 2010-2011 of the MSC Academic Senate. Reviews for tenure and promotion occur annually for faculty that qualify with the requirements for the process. Candidates for promotion or tenure are evaluated by peers and supervisors and the results are reviewed by the departmental personnel committees who make a recommendation prior to submission for review by the GSPH Personnel Committee. Faculty evaluations are based on a meticulous analysis of the functions and tasks performed by faculty throughout diverse positions and categories. In the promotion and tenure process student evaluations and peer evaluations are an important component of the evaluation criteria. As part of peer evaluations, instructional materials developed by faculty (syllabus and course materials) are reviewed for currency and instructional effectiveness. Faculty evaluations by peers and immediate supervisors are generally conducted at the program and department levels.

The GSPH's student learning assessment plan and system also systematize a process for monitoring course material currency and alignment. Faculty teaching a course must send the syllabus to be used in the course with supporting materials to program coordinators at the beginning of the trimester for review and documentation purposes. The coordinator then forwards the documents to the Office of Curriculum and Evaluation and notify any significant changes to the syllabus made by the faculty member. The purpose of this system is to ensure that the syllabus complies with UPR policy which, as part of its mandates, incorporates currency of readings and materials used in the course. UPR policy requires that course

syllabus and materials contain recent bibliographic references from the past 5 years. The second purpose is to ensure that curriculum competency alignment and assessment is maintained in the evaluation strategies and learning assessment opportunities used in the course. If the program coordinator or the Office of Curriculum and Evaluation identify an issue, recommendations for improvement and action are sent to the faculty member. This ensures that a public health discipline specialist (program coordinator) and a curriculum and evaluation specialist (OCE) continuously monitor and ensure curriculum alignment, assessment, and currency (refer to **Electronic Resource File A1.2.c.1** for Student Learning Assessment Plan and faculty training materials).

3) Describe available university and programmatic support for continuous improvement in faculty's instructional roles. Provide three to five examples of school or program involvement in or use of these resources. The description must address both primary instructional faculty and non-primary instructional faculty. (self-study document)

Programmatic support and resources for continuous improvement in teaching effectiveness are available at the UPR-System, campus, school, department, and individual levels. These resources are available to both primary instructional faculty and non-primary instructional faculty.

UPR-System Faculty Development Resources: Professional development resources for instructional roles and effectiveness are offered through the UPR-System and are available to GSPH faculty. One such resource is the Center for Academic Excellence at the UPR-Rio Piedras Campus which offers faculty development training in pedagogical methods, assessment of student learning, mentorship, distance education and ethics among other topics. In 2018 three faculty members completed trainings in the Center for Academic Excellence. Dr. Ivelisse García and Dr. Edgardo Ruiz completed a workshop series on “Student Learning Assessment in the Classroom”. Dr. Marinilda Rivera completed two training workshop series on the “Development of Videos to Strengthen Teaching”, and the “Development of Virtual Environments for Learning”. The University of Puerto Rico offers other training opportunities. For example, in 2020 a 30 hour training program titled “Professional Certification as an Online Facilitator and Course Designer”, developed by the UPR-Rio Piedras Campus, was made available to faculty across the UPR System through the Moodle platform. One of the school’s faculty members, Dr. Rosa Marchand, completed this certification.

Medical Science Campus Resources: The MSC offer a variety of continuous improvement faculty development opportunities through different divisions, programs, and initiatives such as activities by the Academic Development Office of the Deanship for Academic Affairs, library workshops, the Office for Research and Development, Title V Program, Title IX orientations, and the RCM-Online Division, among others. A good example of the use of these resources is the RCM Online Division whose mission is to educate, guide, and assist faculty in the best educational technologies and practices for planning, creating, offering, and evaluating online courses. During academic years 2017-18, 2018-2019, and 2019-2020, more than 25 activities were offered for primary and non-primary faculty members. GSPH faculty have participated extensively in these activities that include webinars, discussions, and trainings. As an example, RCM Online provides a certification as a Blackboard Ultra instructor composed of a series of workshops. The following eight PIF and four Non-PIF from the GSPH completed this training:

- PIF: Dr. Ana Parilla, Dr. Edgardo Ruiz, Dr. Istoni DaLuz Santana, Dr. Ivelisse García, Dr. José Capriles, Dr. José Carrión-Baralt, Dr. María Borges, and Dr. Ruth Ríos.
- Non-PIF: Dr. Carmen Pérez, Dr. Glorimar Caraballo, Dr. Griselle Hernández, Dr. Mercedes Arguelles.

GSPH Faculty Development Activities: At the GSPH level, the Assistant Dean of Academic Affairs' Office offers faculty workshops and seminars in various topics depending on faculty needs and priorities. In AY 2018-2019, as part of the process of curriculum review, design and implementation for the recently revised MPH and DrPH core curricula, multiple strategies for faculty training were implemented. The process included a series of workshops for both primary and non-primary faculty (see **Electronic Resource File E3.3**). All faculty members were encouraged to participate in the workshops, but faculty members who teach the MPH and DrPH core courses were required to participate. In the past three years the GSPH has offered faculty training opportunities on topics such as: competency-based instruction and assessment, syllabus design, student learning assessment, and evaluation rubric design, among others. Thirty-three PIF and three Non-PIF attended at least one of these activities during the past three years. The Office of the Dean may also coordinate training workshops when a priority of the school or need from the faculty is identified. For example, in AY 2017-18 the Dean coordinated two training activities composed of a series of workshops on the use of the Moodle learning management system and distance education strategies (see **Electronic Resource File E3.3**). These training activities were coordinated to lay the foundations for achieving an objective of the strategic plan.

Department and Faculty: Department funds are available to support faculty in participating in trainings on pedagogical methods and instruction. Department Chairs and the Dean may also recommend faculty representatives to attend specific activities, according to institutional and individual academic goals. Faculty are encouraged to participate through their initiative in selecting opportunities that enhance their instructional effectiveness. A recent example from the Gerontology Program is Dr. Nirzka Labault, who completed a "Fundamentals of Online Teaching" course from the University of Wisconsin in 2020.

An inventory of faculty instructional effectiveness training is available in **Electronic Resource File E3.4**.

4) Describe the role of evaluations of instructional effectiveness in decisions about faculty advancement. (self-study document)

The faculty evaluation system is composed of different instruments based on the distribution of a faculty member's academic load. It includes five main areas: (1) General faculty responsibilities (faculty citizenship), (2) teaching, (3) research, (4) service, and (5) academic administration. The instrument for the evaluation of general faculty responsibilities, required in the evaluation for promotion and/or tenure of all primary instructional faculty, is composed of thirty-six criteria. The areas for assessment in this instrument are the following: compliance with faculty responsibilities, professional attitudes, contributions to the institution, professional development, and honors or recognitions. Nine of these thirty-six criteria (25%) correspond to student evaluations, while 30% corresponds to peer review evaluations. The instrument for the evaluation of teaching comprises fifty-three criteria, from which 52% corresponds to student evaluations. Some of the criteria that are evaluated include: instructional techniques, learning assessment and environment, teaching and educational materials, course quality, and currency of course content. The Medical Sciences Campus had established the minimum score each faculty must reach to be promoted to the next academic rank (Certification number 16- 2018-2019, MSC Administrative Board). Peer and student evaluations of instructional effectiveness for faculty with primary instructional responsibilities are an important consideration in these evaluations.

For part-time non-primary instructional faculty, student evaluations of instructional effectiveness are reviewed and considered before contract renewal.

- 5) Select at least three indicators, with one from each of the listed categories that are meaningful to the school or program and relate to instructional quality. Describe the school or program's approach and progress over the last three years for each of the chosen indicators. In addition to at least three from the lists that follow, the school or program may add indicators that are significant to its own mission and context. Schools should focus data and descriptions on its public health degree programs.

TABLE E3.5.a GSPH Instructional Quality Indicators, AY 2018-19 to 2020-21				
Indicator	Target	AY 2018-19	AY 2019-20	AY 2020-21
Faculty Instructional Technique				
Faculty participation in professional development related to instruction	45	39	36	18
School or Program Level Outcomes				
Courses that integrate technology in innovative ways	25	13	35	*
Faculty Currency				
Faculty maintenance of relevant professional credentials or certifications that require continuing education	16	16	16	16
*In AY 2020-2021 all courses were offered using distance education because of covid restrictions. We have decided not to report the number until after in-person instruction resumes and the school identifies the number of courses that continue using technology after normal curriculum activities resume.				

- 6) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The GSPH has a uniform system to evaluate primary instructional faculty in instructional effectiveness, and evaluations have an important role in promotion and tenure decisions and in the hiring of part-time faculty.
- Faculty have ample opportunities for professional development in their areas of instruction and research as well as in pedagogical techniques.

Weaknesses

- Although professional and instructional development opportunities are available to non-primary instructional faculty, participation is low or not sufficiently documented.
- Budget restrictions may limit the availability of resources (e.g. funds) for faculty development and improvement.

Lessons Learned

- Non-primary faculty that works part-time have difficulty attending professional development activities given their limited time commitments due to work responsibilities outside the school. It is important to identify strategies that increase participation of Non-PIF faculty in instructional development activities.

E4. FACULTY SCHOLARSHIP

The school or program has policies and practices in place to support faculty involvement in scholarly activities. As many faculty as possible are involved in research and scholarly activity in some form, whether funded or unfunded. Ongoing participation in research and scholarly activity ensures that faculty are relevant and current in their field of expertise, that their work is peer reviewed and that they are content experts. The types and extent of faculty research align with university and school or program missions and relate to the types of degrees offered. For example, when doctoral degrees are offered, the school or program's research portfolio in those areas take on greater importance. All types of research are valuable, whether conducted with the purpose of improving public health practice or for generating new knowledge. Faculty integrate research and scholarship with their instructional activities. Research allows faculty to bring real-world examples into the classroom to update and inspire teaching and provides opportunities for students to engage in research activities, if desired or appropriate for the degree program.

1) Describe the school or program's definition of and expectations regarding faculty research and scholarly activity. (self-study document)

The mission of the GSPH is to “develop and promote public health through the formation of public health leaders, creating new knowledge, and offering services that will contribute to the welfare of the community”. One significant component of its mission is research, with the goal of promoting a culture of research at all levels, involving students, faculty, and management. As defined in the UPR-MSU's Instruction Manual for Faculty Evaluations (**Electronic Resource File A1.2.e.2**), research and scholarly activities cover the accomplishments of faculty in expanding their respective disciplines' knowledge, finding practical solutions to public health problems, and producing original research. Research and service are central components of faculty and student life. Faculty members are free to pursue their research interests and secure funding for those pursuits. Freedom of research is established in Article 2 of the UPR Law and Section 11.2 of the UPR General Bylaws, which states: “Research freedom consists on the right of each faculty member devoted to research work to conduct it free of restrictions that limit objectivity, intellectual honesty, or the search for truth”.

Part of the mission of the GSPH is to advance knowledge in public health through the planning, execution and dissemination of faculty research that addresses the public health needs of the population. The GSPH Strategic Plan 2017-2022's second goal is oriented towards the strengthening of the school's research activities by: (1) increasing sponsored research grants and the number of full-time faculty devoting time to research; (3) increasing faculty and student peer-reviewed publications; (4) increasing the number of faculty working as reviewers and editorial board members of peer-reviewed journals and research advisory committees; and (4) recruiting faculty members with a history of funded research.

School faculty may have different distributions of time and effort in the areas of teaching, instruction and research depending on their role in the school, program, and/or service or research unit that determines his/her primary responsibilities. However, all faculty are expected to contribute to the creation of new knowledge and a culture of research in the school. For example, instructional faculty members that have primary responsibilities in service in comparison to research, are expected to conduct applied research activities related to their service functions. Although the GSPH has placed funded research as a priority, it

also supports faculty efforts in non-funded applied research that responds to community needs. The school also has faculty devoted primarily to research, such as faculty in the Center of Sociomedical Research and Evaluation (CIES – acronym in Spanish). However, this faculty are non-primary instructional faculty that teach some courses, participate in student's thesis and dissertation committees, and may incorporate students in their research. In this way the GSPH ensures that the research generated by, and the experience of, faculty with primary research responsibilities is incorporated into the curriculum and instruction. In summary, although the distribution of the core areas in teaching, research and service varies by faculty member, the school expects all faculty members to engage with all areas at some level to insure a balance and integration of all the core elements of our mission. All faculty members are therefore expected to be engaged in the generation of new knowledge that advances the field of public health and/or that responds to community needs.

2) Describe available university and school or program support for research and scholarly activities. (self-study document)

The GSPH adheres to all research-related policies, rules, and regulations established by the UPR Board of Trustees and the MSC Administrative Board. Current institutional research policies are described in the Handbook of Policies and Procedures for Sponsored Programs at the UPR. The MSC Chancellor is responsible for implementing all policies at the MSC level. The Vice-President for Research and Technology at the UPR Central Administration is responsible for assuring compliance at the UPR-System level with university regulations and all applicable policies and state and federal laws on research activities.

Strengthening research support and activities has been a priority for the MSC. To that end the MSC created the Deanship of Research in 2015 (Certification 167 2014-15, MSC Administrative Board). The Dean of Research is tasked with developing and implementing policies that enhance research capacity and resources. It is also tasked with supporting researchers in identifying and diversifying sources of research funding, providing administrative support to researchers, and promoting a culture of research. The Center for Research Compliance and Development (CRECED) (Certification 167 2014-15, MSC Administrative Board), under the Dean of Research, provide specialized administrative support to sponsored programs and other externally funded projects. It supports researchers during the whole research award process (pre-award to post-award). The Deanship of Research also oversees the Institutional Research Regulatory Committees which include: the Institutional Review Board (IRB), Institutional Animal Care and Use Committee (IACUC), Institutional Biosafety Committee (IBC) and the Radiation Safety Committee (RSC).

The MSC has policies in place to encourage and support funded research from faculty. The Institutional Policy for Research Incentives (MSC Administrative Board Certification 139 (2000-2001); Certification 116 (2005-2006); Certification 191 (2007-2008) defines the terms of faculty research incentives for those faculty members who secure external funding. These include financial bonuses or protected time. The bonus/protected time policy establishes a compensation system for faculty members receiving external salary support using institutional funds released upon receipt of grant funds. Through agreements with their school deans, researchers can either increase their salary or purchase release time and assign part of their teaching loads to adjunct professors. The amount of release time that can be granted can never exceed 75% of the faculty member's full academic load. Another research policy of the Administrative Board is Certification 30 (1999-2000) which established the distribution of indirect costs received from sponsored research in the MSC according to the following formula: 25% UPR-Central Administration, 12% Chancellor's office, 15% MSC Deanship of Administration, 20% MSC Deanship of Research, 11% Principal Investigator, 10% to PI's department, 7% Office of Dean of the school that originated the proposal. This

distribution allows researchers a portion of indirect costs for additional support in their research projects, bridge funding, or other research related activities. At the dean's discretion, the school's portion may be used to support the school and/or principal investigator's research endeavors.

The MSC also has externally supported research centers, consortiums and programs that support research across all the six professional schools. The GSPH has close interaction with these initiatives and faculty members actively participate and have received support, training and/or funding from these sources. Among them are:

- *Hispanic Alliance for Clinical & Translational Research in Puerto Rico* – Collaboration between three major local academic health care institutions: the UPR Medical Sciences Campus, the *Universidad Central del Caribe*, and the Ponce Health Sciences University. The Alliance, supported by the National Institute of General Medical Sciences, is constituted by stakeholders representing different sectors, including academia, community-based organizations, and the government. Its objective is “to develop and support an integrated, island-wide program focused on conducting clinical and translational research across Puerto Rico that address prevalent diseases and those that affect the medically underserved population”.
- *Center for Collaborative Research in Health Disparities* – This initiative aims to: (1) target specific minority health and health disparities areas for development and provide initial funding for basic, behavioral and/or clinical research activities to support these areas; (2) Promote the professional development of post-doctoral fellows, new faculty and early-stage investigators working in minority health and health disparities research; (3) Develop an efficient and agile research infrastructure to provide specialized instrumentation and services that will facilitate the implementation of transdisciplinary collaborative research in minority health and health disparities; and (4) establish robust and long-lasting partnerships with community-based organizations.
- *The Minority Biomedical Research Support - Support of Continuous Research Excellence (MBRS-SCORE)* - Funded under the umbrella of the Minority Opportunities in Research Division (MORE) in the National Institute of General Medical Sciences (NIGMS) of the NIH. The long-range objective of the MBRS SCORE Program at the UPR-MSC is to develop effective health-related research programs among faculty, contribute to a supportive campus research environment, and stimulate under-represented minority students to enter careers in biomedical research. MBRS SCORE Program funding provides faculty an opportunity to generate sufficient data to present research results at national and international research forums, publish in peer-review journals, and apply for independent research support. The Program encourages developing investigators from throughout the MSC with the expectation that this support will empower them to compete on an equal basis with researchers from institutions with a longer research history and support.
- *UPR Comprehensive Cancer Center (UPRCCC)* - The UPRCCC promotes basic sciences and clinical and epidemiological research in cancer prevention and control in Puerto Rico. In addition, the Center supports programs in cancer information and education for the public, patients, and health professionals. The center also seeks to be the basis for a comprehensive cancer center of excellence in cancer prevention, research, and service for Puerto Rico and the Caribbean, given its primary concern with cancer in Hispanics and other minority populations. The UPRCCC is a public corporation affiliated to the UPR, established by Law 230 of August 2004. The UPRCCC has three main divisions: Cancer Control and Population Sciences, Cancer Biology, and Cancer Medicine. The Cancer Control

and Population Sciences Program aims to reduce the cancer burden among the Puerto Rican population by lowering risk, incidence, morbidity, and mortality, and improving survivorship and quality of life for cancer patients. Its mission is to develop a multidisciplinary cancer prevention and control research program with a strong emphasis on cancer health disparities to reduce the cancer burden among the Puerto Rican population through research and education. The UPRCCC-Cancer Control and Population Sciences Division has four programmatic areas: research (epidemiology, behavioral sciences, and health services research), cancer control programs, surveillance program, and outreach program (<http://www.cccupr.org/>).

- **Mentoring Institute for HIV and Mental Health (MI-HMHR):** The MI-HMHR's primary purpose is to create a stimulating academic environment that will encourage graduate students and junior faculty to pursue careers in clinical, behavioral and prevention research, particularly when the focus of that research is HIV/AIDS and mental health. The MI-HMHR is focused on the development of investigators by the creation of spaces to develop research skills among investigators and mentors. This effort led by the School of Medicine incorporates faculty from the GSPH as mentors and has included junior faculty from the school as mentees.

At the GSPH level, faculty research efforts are supported by protected time for research and the application of all UPR and MSC policies and incentives. The GSPH also has institutional and externally supported research centers that support faculty scholarship. These research centers are:

- *Center for Evaluation and Sociomedical Research (CIES, for its acronym in Spanish)* - The CIES was founded in 1982, and specializes in social program evaluation, applied research, and the development of methods for measuring the success of programs and interventions. Through research and evaluation CIES seeks to raise awareness and improve the process of decision making in government and public, private, and academic sectors. CIES has conducted research and evaluation projects funded by government agencies in Puerto Rico and the United States. Research tools are used to guide the development of public health policies, improve or increase health services and develop the capacity of communities by fostering collaboration among these consortia. The CIES is supported by a portfolio of research projects sponsored by federal or Puerto Rico Government agencies. The CIES also serves as an administrative structure that attracts young researchers to submit sponsored grants and become non-primary instructional faculty in the School.
- *The Puerto Rico Test site for Exploring Contamination Threats (PROTECT) Program* - This NIH-supported program (National Institute on Environmental Health Science Superfund Research Program) brings together multidisciplinary researchers to study the transport, exposure, health impact and remediation of contaminants, with particular attention to chlorinated solvents and phthalates commonly found at Superfund sites, as both suspect and model agents in the high preterm birth rates in Puerto Rico. To do so, PROTECT uses an innovative, holistic, source-to-outcome structure, integrating epidemiological, toxicological, analytical, fate-transport, and remediation studies, along with a unified sampling infrastructure, a centralized, indexed data repository and a data management system. Administrative, research translation, training and community engagement cores engage and inform stakeholders, provide knowledge-transfer activities to the greater SRP and environmental health community, and provide extensive cross-disciplinary training. PROTECT is responsive to NIEHS, EPA and CDC strategic goals, and addresses priority areas identified by the Institute of Medicine Committee on preterm birth. Since the Center's inception in 2010, PROTECT researchers have obtained significant and novel results indicating (1) extensive groundwater contamination in the northern karst region of Puerto Rico (2) potential mechanisms by which

chemicals can stimulate preterm birth; and (3) suspect chemicals that are elevated in the women in this study. PROTECT has also developed a new environmentally friendly technique for efficient decontamination of groundwater and an improved large-volume urinalysis technique. Research results have been documented in over 50 journal papers and 2 full patent applications. In addition, over 480 pregnant study subjects have been enrolled (200 of whom have completed their pregnancies), and over 70 trainees have participated in the Center. PROTECT builds on these successes with continued research and training to provide the much-needed understanding of the role of hazardous chemicals and other environmental factors in preterm birth, and to develop new methods for contaminant remediation in Puerto Rico and beyond.

- *Puerto Rican Elderly Health Conditions Project (PREHCO)* - PREHCO provides quality data for researchers and policy makers about issues affecting the older adult population in Puerto Rico including: health status, housing arrangements, functional status, transfers, labor history, migration, income, childhood characteristics, health insurance, use of health services, marital history, elder abuse, and sexuality among others. The PREHCO Project investigates the characteristics of older adults in Puerto Rico through an island-wide, cross-sectional sample survey of target individuals and their spouses. The project has been funded by the National Institute on Aging (NIA) and it is developed through a collaboration agreement between the Center for Demography and Ecology of the University of Wisconsin-Madison and the Graduate School of Public Health. The project has collected longitudinal data. It has conducted two waves of data collection in 2002/2003 and 2006/2007 and is currently conducting a follow-up study with a third wave of data collection. The data from this third wave serves to: (1) examine longitudinal life course biopsychosocial predictors of cognitive health, cortisol levels, mental health, disability, and mortality 16-20 years after baseline; (2) examine cross-sectional associations between stressors, resilience-enhancing factors, perceived stress, cortisol, and health, as well as changes in health two years later; and (3) increase the utility of PREHCO for cross-cultural comparisons.
- *The Center for Census Data and Health Statistics* - The Center for Census Data and Health Statistics is coordinated by the Graduate Program in Demography. The Center's main objective is to make accessible to the general community data on Puerto Rico published by the Bureau of the Census and data on health statistics produced by the Puerto Rico Department of Health. The Center also offers technical assistance, guidance and training in the use and interpretation of these data. The Center is part of the network of agencies affiliated with the Program of Census Data Centers from Puerto Rico whose lead agency is the Bureau of the Census of the Planning Board of Puerto Rico. The Center has one of the most comprehensive collections of written reports on population censuses in Puerto Rico. It also has written reports of vital statistics produced by the Puerto Rico Department of Health.

3) Describe and provide three to five examples of faculty research activities and how faculty integrate research and scholarly activities and experience into their instruction of students. (self-study document)

Research activities of faculty have an important role in instruction at the GSPH. The research activity of faculty has an impact in a variety of ways. First, faculty research projects and experiences provide examples and case studies for discussion of course concepts and skills. Second, the data generated by faculty research projects provide students with an opportunity to learn research skills with real-world data relevant to their interests that enhances their learning experience. And finally, faculty research projects provide opportunities for students to conduct research projects as part of their curriculum requirements. Examples of faculty research impact on instruction are provided below.

Dr. Cynthia Pérez-Cardona has been co-PI and investigator on several NIH-sponsored grants and has incorporated her research efforts into classroom instruction and experiences. In the Epidemiological Methodology (EPID 6523) and Introduction to Public Health Research (SALP 6250) courses, she details her work with her NIH-funded studies (San Juan Overweight Adults Longitudinal Study, Epidemiology of Viral Hepatitis, HIV, and Herpes Simplex II Study, PR-OUTLOOK) to discuss the design and analysis of observational epidemiologic studies. Moreover, her collaborations with researchers of the Hispanic Community Health Study/Study of Latinos, The Latin American Consortium of Studies of Obesity, and the Non-communicable Disease Risk Factor Collaboration (NCD-RisC) have allowed her to enhance the discussions of assessing the validity and reliability of diagnostic and screening tests, measuring disease occurrence and associations between exposures and outcomes, and reporting findings of epidemiologic studies. Dr. Pérez is also the Co-PI of PR-OUTLOOK (Puerto Rico Young Adults' Stress, Contextual, Behavioral & Cardiometabolic Risk), an NHLBI-funded study, that investigates psychosocial and sociodemographic determinants of cardiovascular disease risk factors and overall cardiovascular health among young adults. Other participating institutions include the University of Massachusetts Medical School (Dr. Milagros Rosal, Co-PI; Dr. Catarina Kiefe, Co-PI; Dr. Sharina Person, Co-I), Harvard T.H. Chan School of Public Health (Dr. Josiemer Mattei, Co-I), and University of Massachusetts Lowell (Dr. Katherine Tucker, Co-I). Several undergraduate and graduate students have participated in this project in diverse research tasks, including identifying census blocks to enumerate all households, drawing maps detailing the boundaries of each census block, making recruitment calls, assessing eligibility of participants, making reminder calls, getting informed consent from participants, conducting online baseline and follow-up interviews, and designing REDCap database, study website, and promotional materials. The students have greatly benefited from this research experience by contributing to the development and strengthening of required public health core competencies. Moreover, they have participated in research team meetings and training activities (probabilistic sampling, REDCap, research ethics, and motivational interviewing, among others). Dr. Pérez also has used her datasets for student group projects in Statistical Computing Applied to Public Health and Statistical Methods Applied to Epidemiology courses, where they (1) analyze quantitative data using biostatistics, computer-based programming, and software, (2) interpret the results and implications for public health practice, and (3) communicate public health content, in writing and through oral presentation. Her research work has also supported culminating experiences of epidemiology graduate students (Epidemiologic Research I, Epidemiologic Research II, and Epidemiologic Research III), which have resulted in published manuscripts and oral and poster conference presentations.

Faculty members Dr. Cruz Nazario, Dr. Rosa V. Rosario-Rosado, and Dr. Imar Mansilla-Rivera, (professors at the Department of Biostatistics and Epidemiology and the Department of Environmental Health, respectively) have been collaborating since 2008 with faculty of the UPR Rio Piedras Campus and the University at Buffalo, State University of New York in a population-based case-control study (Atabey Study) focusing on the epidemiology of female breast cancer in Puerto Rico. The Atabey Study has provided research opportunities to graduate students to plan and conduct secondary data analysis using baseline data and collecting complimentary data for their research under the courses Epidemiologic Research I (EPID 6561), Epidemiologic Research II (EPID 6562), and Epidemiologic Research III (EPID 6563) of the Master of Sciences in Epidemiology Program. For example, in 2016 a student analyzed the risk of breast cancer related to proximity to power plants. This opportunity allowed her to conceptualize, plan, collect GIS data, and conduct a study to assess the association between residential proximity to a power plant during adolescence and breast cancer among women in Puerto Rico. This study received a special recognition during the V Puerto Rican Conference on Public Health. In 2018, another student collected new data on breast cancer tumor markers to complement the Atabey baseline data on cancer molecular subtypes for her thesis assessing the association between intake of carotenoids and female breast cancer

in Puerto Rico. These are only a few examples to showcase how this research initiative impacts students instruction in the curriculum.

The Puerto Rico Health Conditions Project led by Dr. Ana Luisa Dávila provides an example of how research efforts impact a variety of the school's academic programs. Dr. Dávila is faculty from the Master in Science in Demography. She collaborates with the MPH-Gerontology program providing guest lectures which uses data from the project to help gerontology students have a firm basis on the health and social profile of the older adult population. The data generated by PREHCO is also used for instruction. In the research course for MPH students in the gerontology specialty, data from PREHCO is used to teach students to use SPSS and perform basic quantitative analyses. This allows students to learn quantitative analysis skills with real world data that enhances their understanding of the older adult population that is at the center of their specialty. PREHCO data is also available to students in other programs for their research courses and thesis projects.

Doctor Carmen Albizu-García is the Principal Investigator of the project entitled "Independent Evaluation of the Model of Medication-Assisted Treatment and Comprehensive HIV Care, Based on Scientific Evidence, for People Dependent on Opioid Drugs (Heroin)", conducted in the Dominican Republic. This study utilized a developmental evaluation model to assess and address the varying contextual factors that facilitated or challenged program implementation and outcomes of the country's first pilot program to utilize medication with buprenorphine-naloxone to treat opioid use disorders. The study provided opportunities to illustrate factors contributing to the application of this evaluation model, its implementation and use of findings to contribute to the implementation process, assessment of outcomes and sustainability. Dr. Albizu-García utilized the evaluation conducted as part of this project as a case study in the introductory course Evaluation Principles (EVAL 6610).

Dr. Mercedes Argüelles-Morales is the Principal Investigator for the research project "Food insecurity and its relationship with the academic achievement and the health status of undergraduate students at the UPR Rio Piedras Campus". She engages students of the course NUTR 6535 (Research Project) in community-based nutrition research focused on improving the lives of the people targeted by the study. This research is action-oriented and aims to promote change. The focus of research on the community is rooted in the belief that because the nutritional problems manifest themselves in the community, the community is also where the problem should be defined and analyzed. Her master's level research students not only perform literature review and summarize data but also develop their own research proposal on a specific community. They collect and analyze data, and report research outcome with recommendations to the community. This approach provides students the opportunity to engage with various community organizations and a venue to apply the knowledge and skills acquired in the classroom to a real-world setting.

4) Describe and provide three to five examples of student opportunities for involvement in faculty research and scholarly activities. (self-study document)

Students have various opportunities for involvement in faculty research and scholarly activities. One of the main mechanisms for student involvement is through the MSC Graduate Assistantships Program. The UPR system provides graduate student assistantships to develop skills in research and/or teaching while providing financial aid (Board of Trustees Certification 140, 1999-2000). On average, nearly \$350,000 is distributed each year to GSPH students under this program. The program provides faculty additional support in research activities while providing students with mentored research experiences. Students who

receive a research assistantship are assigned a faculty member who may be working on funded and/or non-funded research and community projects. Sponsored research provides other opportunities for students when student participation or student assistantship funds are part of the project. The following are some examples of student opportunities for research.

Dr. Pablo A. Méndez-Lázaro (PI) , Dr. Cynthia Perez Cardona (Co-PI), Dr. Ana P. Ortiz (Co-PI) and Dr. Aluisio Pimenta are currently exploiting new technologies in ways that benefit all segments of socio-ecological and technological systems by applying Earth Observing Data and Remote Sensing to research on public health and vulnerable populations. Dr. Méndez-Lázaro is developing products that can be applied to specific environments to communicate complex science at the intersection of many disciplines to stakeholders using emerging spatial computation and visualization techniques to advance decision support. These projects have provided opportunities to over 30 graduate students (scholarships, fellowships, research assistants) to plan and conduct secondary data analysis under the courses SAAM 6537 and SAAM 6531 Water Environment and Public Health Course and EPID 6524: Community Health Needs Assessment. Graduate Students under the guidance of Dr. Pablo A. Méndez Lázaro have presented on International Conferences such as American Geophysical Union.

Dr. Ana Patricia Ortiz, Professor of the Department of Biostatistics and Epidemiology, and investigator within the Division of Cancer Control and Population Sciences of the UPRCCC, is the PI of multiple research studies focused on cancer prevention and control research. Among active research projects, Dr. Ortiz is a researcher at the Puerto Rico site of the AIDS Malignancy Consortium and of the ANCHOR Study: Anal Cancer/ HSIL Outcomes Research Study. She is also in a multiple PI project with Dr. Cynthia Perez in a study of the associations of oral microbiota with oral HPV infection among Hispanic adults and of a study elucidating the impact of hurricanes Irma and Maria on gynecologic oncology care in Puerto Rico. GSPH students in the MSC Graduate Assistantships Program participate with Dr. Ortiz in these research projects. Student participation in these projects have resulted in dissertations and in multiple student publications as first authors in peer reviewed journal, and additional participation of students as co-authors in research manuscripts. Research projects have included the risk of secondary anal cancer in women with a primary HPV-related gynecologic cancer, colorectal cancer survival in persons from the government-health plan in PR, and an assessment of anal cancer screening tools in detecting high-grade anal squamous intraepithelial lesions in women, among multiple others. Through her research collaborations with the Puerto Rico Central Cancer Registry and other public health organizations in Puerto Rico, Dr. Ortiz has also been able to involve students from EPID 6553 in practical epidemiologic and public health research experiences, that have resulted in poster presentations, publications, and the development of over 30 cancer-related educational materials for the community.

Doctor Istoni Da Luz has been researching stochastic process, spatial statistics, and bayesian inference applied to Public Health problems. His students (research assistants and volunteers) have the opportunity to apply their theoretical knowledge to real problems related to different areas, such as: COVID-19, HIV, cancer and natural disasters. The students acquire additional experience in database management, preparation of technical reports, in addition to learning other statistical methodologies not covered in their regular courses. Recently, some students actively collaborated on new methodological discoveries, allowing them to exhibit their study findings at renowned international congresses and be co-authors in scientific articles.

Dr. Aluisio Pimenta and Dr. Sergio Caporali are currently running an applied research project at the Puerto Rico Marine Port to monitor and analyze diesel particulate matter, some of its chemical components, and the size distribution in the air, and relate these parameters with remote sensing satellite imagery. There

are currently eight graduate students actively participating in this project, configuring, calibrating, operating and validating monitoring equipment as well as conducting chemical analyzes in their laboratories. This experience allows students to put into practice what they learn in the industrial hygiene Sampling Laboratory course (SAAM 6548) about sampling and analyses. It represents an invaluable experience for students who gather real life experience before graduating. Dr. Sergio Caporali (Department of Environmental Health) is also running an applied research project assessing the effect of air density and its ability to keep aerosol contaminant inside a local exhaust ventilation system. This project is run in the continental US and it currently involves a DrPH student in data collection and analysis, providing real-life research experience in the importance of control variables, covariates and designed experiments in industrial hygiene applied research.

Another example is the research experience that students may obtain through their participation in the ECHORN project. The Eastern Caribbean Health Outcomes Research Network (ECHORN ADULT) is a collaborative project between the Yale School of Medicine and four sites in the Eastern Caribbean (Barbados, Trinidad & Tobago, US Virgin Islands, and Puerto Rico). Dr. Marcella Nunez-Smith, faculty of the Yale School of Medicine is the Principal Investigator of the overall ECHORN project and Dr. Cruz Nazario is the Principal Investigator for the ECHORN Puerto Rico site. One component of ECHORN is the ECHORN Cohort Study (ECS). Several graduate students from different programs such as biostatistics (MPH), epidemiology (MPH and MS) as well as students from other UPR campuses (undergraduates and graduates) have worked under the Graduate Assistantship Program and as volunteers. As research assistants the students have worked in the following tasks, depending on the stage of the study: identification of sampling frames, field recruitment, coordinating interviews, conducting interviews in clinical settings, preparing laboratory reports, and data entry. The ECHORN Cohort Study has become a “real world professional practice setting” for students since 2016. Students have had the opportunity to develop and improve research related competencies such as multidisciplinary teamwork, cultural sensitivity, community outreach, clinical skills, public health ethics and professionalism. Students have had the opportunity to attend local site meetings with the Yale research team and the participating islands, as they shared their research experiences and plans for their professional future with Dr. Nunez-Smith and her team during site visits.

5) Describe the role of research and scholarly activity in decisions about faculty advancement. (self-study document)

The UPR System grants the academic ranks of instructor, assistant professor, associate professor, and professor, and the equivalent levels for the rank of researcher. A general description of the criteria and procedures used by the institution for faculty advancement (tenure status and/or promotion) is described in the UPR-MSU Faculty Evaluation Instruction Manual. Research is one of the areas evaluated in tenure and promotion decisions. In the final evaluation of the faculty members requesting advancement the research component is weighed based on the distribution of research activity in the faculty member's academic load in the years being evaluated. The distribution is agreed to by the faculty member and the department chairperson. The research component evaluation considers accomplishments in expanding discipline's knowledge, finding practical solutions to public health problems, and producing original research. The evaluation instrument covers three components: research quality, integration of research to the instruction of students, and productivity (research products and obtained grants). Peers perform the evaluation with appropriate mechanisms.

6) Select at least three of the following measures that are meaningful to the school or program and demonstrate its success in research and scholarly activities. Provide a target for each measure and data from the last three years in the format of Template E4-1. In addition to at least three from the

list that follows, the school or program may add measures that are significant to its own mission and context. Schools should focus data and descriptions on faculty associated with the school's public health degree programs.

TABLE E4.6.a GSPH Outcome Measures for Faculty Research and Scholarly Activities				
Outcome Measure	Target ¹	AY 2017-2018	AY 2018-2019	AY 2019-2020
Total research funding	\$6,717,097	\$9,170,996	\$8,142,852	\$10,088,269
Articles published in peer-reviewed journals	50	74	72	49
Presentations in Professional Meetings	67	52	40	37
Faculty as PI in sponsored projects administered in the GSPH	23	16	18	20
Externally-funded projects	52	35	37	54
¹ Based on GSPH Strategic Plan targets expressed as a percentage increase from base year data (10% increase in research funding, 60% increase in publications, 20% increase in presentations, 60% increase in faculty as PI in sponsored research, 60% increase in externally-funded projects).				

7) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The UPR-GSPH has a well-qualified, multidisciplinary faculty with strong commitment to public health research consistent with its mission to improve the health of the public. The faculty members are free to pursue their research interests. Therefore, there are diverse research topics such as occupational safety and health, air quality, agrotourism, HIV/AIDS, HPV, chronic noncommunicable diseases, aging and health, and management of diseases after natural disasters among others.
- The diversity of research topics reflects the diversity in sources of research funding that include the National Institutes of Health (NIH), the Health Resources and Services Administration (HRSA), the Substance Abuse and Mental Health Services Administration (SAMHSA), the Occupational Safety and Health Administration (OSHA), the Centers for Diseases Control and Prevention (CDC), the National Aeronautics and Space Administration (NASA), the National Science Foundation (NSF), and the U.S. Environmental Protection Agency (EPA).
- The collaborations within the UPR-GSPH, between UPR campuses, and with institutions outside of Puerto Rico have been successful and long-standing.
- Faculty research provides opportunities for students to acquire research skills in curricular and extracurricular research activities.

Weaknesses

- There is a need for tenure-track positions for several existing research faculty within the GSPH.

Lessons Learned

- The GSPH is engaged in multiple research areas. However, the dissemination of research activities needs to be strengthened.

E5. FACULTY EXTRAMURAL SERVICE

The school or program defines expectations regarding faculty extramural service activity. Participation in internal university committees is not within the definition of this section. Service as described here refers to contributions of professional expertise to the community, including professional practice. It is an explicit activity undertaken for the benefit of the greater society, over and beyond what is accomplished through instruction and research. As many faculty as possible are actively engaged with the community through communication, collaboration, consultation, provision of technical assistance and other means of sharing the school or program's professional knowledge and skills. Faculty engage in service by consulting with public or private organizations on issues relevant to public health; providing testimony or technical support to administrative, legislative, and judicial bodies; serving as board members and officers of professional associations; reviewing grant applications; and serving as members of community-based organizations, community advisory boards or other groups. While these activities may generate revenue, the value of faculty service is not measured in financial terms.

1) Describe the school or program's definition and expectations regarding faculty extramural service activity. Explain how these relate/compare to university definitions and expectations. (self-study document)

The MSC is composed of six schools which focus on the formation of health professionals. For this reason, service to the community is at the core of its mission and one of its strengths. The MSC recognizes both clinical service and special service (which is more applicable to the GSPH's service activities). The MSC has a definition for service and special service that is used for faculty evaluations in the Faculty Evaluation Instruction Manual. It defines service as a faculty members' application of a body of knowledge to address an issue related to: (1) the institution and the development of students, (2) persons, groups, agencies, or community institutions, and (3) his/her profession or discipline. It further provides a definition for special service as one that the faculty member offers by his/her initiative, by invitation, or by an institutional assignment. Examples of services recognized by the MSC are: policy analysis, program evaluation, community development, professional development, among others. Service in the MSC is defined broadly to encompass the diverse ways in which different professions on campus apply knowledge to address a broad set of health issues. The definitions and expectations set by the MSC is aligned with those of the GSPH where it is expected that faculty will engage in service activities as part of their academic load.

The GSPH defines public health service as "the interdisciplinary application of knowledge, skills and necessary competence to perform public health functions for the benefit of the community." These services are designed with individuals, community groups, agencies, or institutions, and cover a wide range of activities that address community health needs and support teaching and research. The GSPH recognizes the unique role that faculty have in providing education, consulting, and other services to agencies outside of the University. The GSPH strives to be an important resource to the community and society. Therefore, its mission has as one of its components the importance of offering services that contribute to the welfare of the community. This is contained in one of the goals of the GSPH Strategic Plan 2017-2022. The school seeks to strengthen active participation of the GSPH in public policy, health

advocacy, health education and the development of strategies for the delivery of public health services and programs from an ecological and sustainable development perspective. It also seeks to strengthen service initiatives through transdisciplinary and inter-sectoral alliances with the community. One of the strategic plan objectives is to increase technical assistance and consulting for public and private agencies and community-based organizations. The GSPH expects that all faculty will serve the community-at-large in a professional capacity that enhances the standing of the school and the UPR as a whole.

Service activities are grouped into various categories. These include service provided by the faculty and students to community groups and organizations such as: conferences, consultation, and technical assistance; participation in community and agency boards or committees; direct participation in services planning, implementation, and evaluation; public policy design or development as experts; and advocacy activities. Faculty provide other services to professional societies such as lectures in conferences, technical expertise, consulting, and participation on editorial boards as chairs or active members. The GSPH also has service institutes and centers that provide unique services to community groups and organizations as part of their academic activities. In these initiatives there are community representatives interacting with faculty members and students as a learning community. This facilitates the integration of the community in designing, implementing, and evaluating public health services. The GSPH also recognizes applied and evaluation research done on behalf of government agencies or community organizations. It is important to note that research and service activities in the school have a very close relationship. Most research projects have a service component, and most service projects have an applied research component.

2) Describe available university and school or program support for extramural service activities. (self-study document)

The Service Committee and the GSPH's institutional service programs, institutes, and centers provide the primary organizational support for service activities. The Service Committee is charged with overseeing the school's service policy approved by the GSPH faculty. Among the Committee's functions, as stated in the GSPH Bylaws are to: (1) provide advice to the Dean on all aspects related to providing services to the community; (2) support the implementation of the service goals and objectives contained in the GSPH strategic plan; (4) promote and assure compliance with the service policy; (5) facilitate the integration of teaching, research and services activities; (6) promote the delivery of community services that support teaching and research; (7) establish and oversee the adoption and registration of collaborative agreements and projects with community organizations, agencies and institutions; (8) establish a database to enhance the documentation of service activities; analyze data gathered, and propose recommendations based on findings; and, (9) submit progress reports to the faculty.

The GSPH has an active service program that makes a significant contribution to the advancement of public health practice in Puerto Rico and responds to the health needs of the Island's population. The GSPH has several service programs, institutes, and centers through which faculty members provide direct interventions and /or clinical services. The following is a brief description of the service centers, institutes and programs in the school.

- *Puerto Rico Title X Family Planning Program (PREVEN Program)* - The Puerto Rico Title X Family Planning Program's mission is to provide comprehensive sexual and reproductive health services to men and women in reproductive age, with special emphasis on serving adolescents, preventing pregnancy, illegal drugs and alcohol use, and sexually transmitted diseases. The GSPH has been a Title X grantee since 1972. Program services include complete medical evaluation; health education and counseling; orientation on abstinence and natural family planning; education about and provision of contraceptive methods approved by the Federal Food and Drug Administration (FDA); referrals for STD and HIV screening; and community-based support programs for the development of peer education activities such as youth summits, walkathons, and theater forums. Family planning services are available to all managed care Medicaid clients, in particular to residents of the northeastern, central, and southwestern regions of the Island. Services are offered in 11 clinics across Puerto Rico.
- *Institute on Developmental Disabilities (IDD) - The Puerto Rico University Center for Excellence in Developmental Disabilities (PR-UCEDD)* - The IDD seeks to enhance the quality of life of individuals with intellectual and developmental disabilities and their families. The IDD- PR-UCEDD has been an Administration for Intellectual and Developmental Disabilities grantee for the last 29 years. Its goal is improving access and quality of services to promote full participation of people with IDD in all aspects of the community and society. The objectives are: 1) Increase the quantity and quality of interdisciplinary professionals in the workforce of Puerto Rico who provide services to populations with IDD; 2) Provide training and Technical Assistance to government agencies and community based organizations; 3) To conduct basic and applied research, program evaluation and policy analysis; 4) Disseminate culturally appropriate curricula and training materials, research reports and other information related to intellectual and developmental disabilities.
- *Child Development Center (CEDI – Spanish acronym)*- The Child Development Center (CEDI) is a project that began in 1993 as an initiative of the Institute for Development Disabilities PR-UCEDD. The CEDI is a center for the care and development of infants and mothers between the ages of 2 months to 3 years with an inclusive environment where children with developmental disabilities share with their typically developmental peers. The methodology is aimed at integrating family-centered services that serve to provide developmental support. As a laboratory center, it helps children develop their abilities and potential, in order to help integrate a creative, free, supportive and socially responsible individual.
- *UPR Center for Public Health Preparedness* - The University of Puerto Rico Center for Public Health Preparedness (UPR-CPHP) began as a collaborative project with the Emory University CPHP. The UPR-CPHP focuses on training, service, and research aimed at enhancing and assessing Puerto Rico's level of preparedness and capability to respond effectively to emergencies and disasters. The UPR-CPHP's activities center in four areas: (1) Addressing the training needs of first responders, public health professionals and healthcare facility personnel to enhance their level of preparedness and capability to respond effectively to disasters and emergencies; (2) Conducting large-scale assessments of the level of preparedness and response capability of institutions and organizations in Puerto Rico; (3) Evaluating the structure, capabilities, and performance of the Puerto Rico public health, medical care

and mental health systems for preparedness and emergency response activities; and (4) Reviewing and updating emergency operational plans for hospitals and government agencies. The center is supported by external grants and develops research and service projects based on its funding.

- *WHO Collaborating Centre for Training and Research in Health Promotion and Health Education* - The WHO designated the GSPH as a training center. The general aim of this center is to collaborate with WHO and PAHO in the development of the agenda and implementation of initiatives to strengthen vocational training, human resource training, and research in health promotion and health education with a focus on Latin American and Caribbean countries. The center provides support and technical assistance in the development and establishment of human resources training programs for health promotion and education in Latin America and the Caribbean.
- *Puerto Rico Geriatric Workforce Enhancement Program (PRGWEP)* – This initiative funded by the Health Resources and Services Administration provides workforce training for health professionals to better address older adult services and needs. The program also provides training for older adults and caregivers in self-management strategies and older adult caregiving skills. The program has established collaborations with federally qualified primary health centers (FQHC) in the east of Puerto Rico to provide technical assistance and training for the implementation of age-friendly principles into these clinics and care sites. The project also provides FQHC staff training, technical assistance and community education and dissemination.

Service activities are also supported through department chairperson endorsed protected time for service activities. The school also has 41 formal agreements and contracts with Puerto Rico, U.S. and international organizations, communities, and agencies as a result of these efforts that facilitate faculty service activities.

3) Describe and provide three to five examples of faculty extramural service activities and how faculty integrate service experiences into their instruction of students. (self-study document)

Faculty are actively involved in a number of service activities and projects focused on providing support to community networks. These activities provide real-world examples that enhance teaching about the application of concepts, processes and skills covered in courses. They also provide opportunities for student involvement in service activities in the curriculum that enhance student's learning experience. The following are some examples from the GSPH.

Dr. Luis Bonilla has long been an advocate for environmental health issues in Puerto Rican communities. In 2018 he was approached by a community-based advocacy organization, *Grupo Guayamenses Unidos por tu Salud*, to help in community advocacy efforts related to the health effects of a coal burning power plant next to communities. Dr. Bonilla used the opportunity to provide students in three sections of the SAAM 6528: Principles of Environmental Health course with field experience. Students collected data on the prevalence of chronic diseases related to exposure to air contaminants in the communities of *Puerto Jobos* and *Miramar* in the municipality of Guayama. The survey data would build on a previous study in these communities and could serve as a follow-up. Students had the opportunity to meet community

leaders, conduct surveys and learn the use of RedCap software. This exposed students not only to methodological techniques but also to an educational applied experience conducive to a better understanding of the relationship between environmental contaminants and human health effects in a timely and real-world scenario. Dr. Bonilla collaborated with NGO community organizations in the dissemination of the study and in advocacy efforts on behalf of the community. At the request of the coordinators of the SALP 6006: Introduction to Public Health course, Dr. Bonilla organized a forum activity with Atty. Erick Abreu, a lawyer working in advocacy efforts with an NGO, and Dr. Domingo Cáceres, a family physician and president of Puerto Rico's College of Physicians and Surgeons Foundation, on behalf of these communities. As part of the SALP 6006 course a forum or talk is coordinated after the fundamental concepts of public health functions, the importance of evidence, and health promotion units have been covered. This activity serves as an illustration of the integration of these topics in real public health scenarios. It combines representatives from academia and the community, or public health practitioners, to talk about a public health issue with students so they can see a real-world example of the application of public health knowledge to real world issues in the community. In the forum, Dr. Bonilla, Atty. Erick Abreu, and Dr. Domingo Cáceres shared with students the environmental health issues affecting the communities of Guayama, the efforts to collect evidence, and the experience of public health advocacy and health promotion that followed. After a brief presentation and talk, using a guideline of the course content, the students had the opportunity to ask questions about the issue presented. This activity provided students with a real-world example, early in the curriculum (it is the first course taken by all GSPH students), of different components of public health coming together in actions and efforts to address community health issues.

Dr. Hiram Arroyo is the director of the WHO Collaborating Centre for Training and Research in Health Promotion and Health Education. Through his vast experience providing technical support and trainings in Puerto Rico and across the Caribbean and Latin America he has developed a wide network of contacts with academics, public health practitioners and government and community organizations. Dr. Arroyo leverages his network of contacts to provide guest lectures and round table discussions with local and international public health experts and practitioners in his courses (SALP 6005 Foundations of Health Promotion and EDSA 6401 Perspectives and Contexts of Health Promotion and Health Education). In his courses to DrPH students (SALP 8005 Health Promotion Seminar and DESS 8206 Community building and action on the Social Determinants of Health), he brings guests weekly to provide students with different health promotion perspectives, models, and initiatives. In academic year 2020-2021 for example he has brought guests speakers such as: Dr. Liane Comeau (Executive Director, International Union of Health Promotion and Education, Montreal, Canada), Dr. María Constanza Granados (Javeriana University, Bogotá, Colombia), Dr. Adriana Stanford Camargo (National Secretariat of Health Promotion, México), Prof. Anselmo Cancino (Chilean Ministry of Health, Santiago, Chile), Prof. Jorge Laureano Eugenio (Jalisco Secretary of Health, México), Prof. Regiane Rezende (WHO/PAHO National Office, Brasília, Brazil), Dr. Pablo Alberto Sáenz (University of Alicante, Spain), Dr. María del Consuelo Chapela (Autonomous Metropolitan University of Xochimilco in Mexico), and Dra. Yitza A. Arcelay Rojas (Walden University, USA). This ensures that all doctoral public health students gain a wider set of perspectives on public health issues and health promotion initiatives to address them.

Dr. Juan Carlos Reyes, Dr. Cynthia Pérez and Dr. Dharma Vázquez (from the Departments of Biostatistics and Epidemiology, and Health Service Administration) served in the COVID Medical Task Force formed by the Governor of Puerto Rico at the beginning of the pandemic to advise the Governor's Office and the Puerto Rico Department of Health in implementing policy and actions for handling the spread of the virus in Puerto Rico. Moreover, Dr. Linnette Rodríguez, Dr. Erick Suárez and Dr. Ana Patricia Ortiz (faculty from the Biostatistics and Epidemiology Department) assisted the COVID Medical Task Force and the Department of Health in providing up-to-date scientific evidence, designing the covid surveillance system and contact-tracing protocols, analyzing data to provide daily updates, and generating projections for the Department of Health. This experience has been integrated into instruction of students. For example, Dr. Juan Carlos Reyes used the experience in the design and implementation of the surveillance system in emergency conditions to guide students in an evaluation of the covid surveillance and contact tracing system, based on established criteria for the evaluation of surveillance systems, as part of the EPID 6527: Public Health Surveillance course during AY 2019-20. In the DrPH course EPID 8005 Advanced Methods in Epidemiology, Dr. Reyes used his experience in advising on public health policies in the Covid Medical Task Force to design an activity where doctoral students were assigned into two groups for a debate. One group had to support economic reopening during the pandemic and another support economic closure based on epidemiological and social determinants of health evidence. Dr. Reyes has also served as a consultant and advisor for numerous organizations on substance abuse issues. His experience in this service arena served as an opportunity for students in his public health surveillance course in AY 2020-21 to design a Drug Observatory surveillance system as part of the course to respond to Puerto Rico Senate Project 74 from the office of Hon. José Vargas Vidot, a Senator in the Puerto Rico Legislature.

4) Describe and provide three to five examples of student opportunities for involvement in faculty extramural service. (self-study document)

Faculty service activities provide opportunities for students to get involved beyond the curriculum. There are different mechanisms for student involvement. These can be formal opportunities through the MSC Graduate Assistantships Program and sponsored service projects and programs. In these instances, students can get involved in school service centers and faculty service projects and activities while receiving financial support. Community-based research activities also have a service component that provide opportunities for student involvement in service activities that enhance their skills and competencies beyond those related to research. Another way student can get involved in service opportunities is through volunteer activities coordinated through faculty service activities and networks. Some examples of student participation in faculty service activities are described below.

As part of faculty's involvement in service to the Covid Medical Taskforce and the Puerto Rico Department of Health (described in the above section), students were integrated in these efforts. Led and coordinated by Dr. Linnette Rodríguez from the Biostatistics and Epidemiology Department, students in the epidemiology program were contacted for their interest in serving as volunteers in covid mitigation efforts. Through these school contacts and the leadership of epidemiology students, such as Lianeris Estremera, GSPH students provided support for the State Epidemiologist at the time, Dr. David Capó, and

the Puerto Rico National Guard in helping set up test sites. Student volunteers also provided support in these test sites by assisting in the collection of information in the screening and testing process. This opportunity also involved other students from the MSC. This provided students valuable experience in handling public health crises and response. This is one example of faculty service creating opportunities for volunteer work.

Dr. Dharma Vázquez is the Project Director of the Puerto Rico Geriatric Workforce Enhancement Program. The project has an evaluation component for program activities led by Dr. Ruth Ríos. The evaluation core of the project hired student Yazmin Flores, who is an alumnus of the school's Master in Science in Evaluation and Research and is currently a doctoral student in the DrPH with a specialty in Health System Analysis and Management. Yazmin Flores supports activity and program evaluation efforts with data analysis and management, and the development of program and activity evaluation reports. She also participates in project team meetings that help enhance her skills in program management and implementation. This is one example of projects creating opportunities for student paid service.

Dr. Carmen Velez Vega is the local PI for the Puerto Rico Test site for Exploring Contamination Threats (PROTECT) (see description on Criteria E4) which involves students in service activities. The investigators call students "PROTECT trainees" as the expectation is to support their careers in research and applied public health under the Research Experience Training and Coordination Core of the project. Trainees have the opportunity to attend an annual event to receive an orientation on opportunities as a PROTECT trainee. The newly recruited trainees are also invited to a yearly online event called the PROTECT Academy in which they learn and meet the PROTECT/CRECE/ECHO investigators, who present their research. They also learn about the supporting cores of the project: Data Core, Community Engagement Core, Research Translation Core and Human Subject and Sampling Core. Trainees complete an individual development plan where they state the activities and goals they have for the year. The opportunities are many and diverse. A student can choose to work on hands on information collection, in interviews and other research procedures, they can chose to work with the Data Core in creating a data base, working on an analysis of their own and data entering. In the Community Engagement Core and the Research Translation Core development opportunities are provided in translational projects. Trainees can choose to work with the report back process with the Community Engagement Core. The "report back" of results to participants is one of the main objectives of the Community Engagement Core (CEC). The Investigators model for the trainees the importance of the participant's "right to know" as has been supported by the National Academies and give them the opportunity to disseminate results and important information to PROTECT participants, collaborators, and the surrounding communities. Every year NIEHS hold the Superfund Research Program Annual Meeting where trainees are encouraged to present abstracts for posters and oral presentations. During this meeting they can participate in the Research Experience Training and Coordination Core activities of all of the Superfund Programs funded by NIEHS. NIEHS offers a few opportunities to compete for externships, and other research awards. PROTECT trainees have received various awards throughout the years. One trainee has been recently awarded a Diversity Supplement and is now doing her post doc work locally. Finally, trainees are encouraged to develop abstracts with program mentors for selected presentations in conferences. Students are also involved in the writing process and many of them have more than one publication during their time in the program.

Dr. Carmen Velez Vega is also the local Principal Investigator for other federally-funded projects, including the “Zika in Pregnancy and Infancy” study. As the Zika epidemic began, her trainees were involved with partners from the University of Rochester OBGYN Department’s Global Health network in several studies on the understanding and challenges of the Zika virus. Student trainees have also participated, and in some instances have leaded, efforts of community engagement for the Zika epidemic and later for the hurricanes Irma and Maria, the Earthquakes on 2020, and the COVID 19 pandemic. For the COVID pandemic trainees were involved in a number of initiatives that include providing material support and education to the participants and in the development of materials in social media outlets for delivering and disseminating important health information on COVID for pregnant people and people with young children. A series of brochures and infographics were developed based on the questions and information needs expressed by the project’s participants and collaborators from community health centers. These are examples of how community-based research projects provide student opportunities in both research and service.

The Institute of Developmental Disabilities-PRUCEDD has played a key role in every major Puerto Rico disability initiative over the past three decades. Many issues, such as early intervention, health care, community-based services, inclusive and meaningful education, transition from school to work, employment, housing, assistive technology, and transportation has directly benefited by the services, research, and training provided by the IDD-PRUCEDD. Students are part of, and are encourage to actively participate in, the implementation of all initiatives. They are also encouraged to participate in the implementation of the IDD-PRUCEDD core functions of providing preservice preparation, services (including technical assistance, community education, and direct services), research, and information dissemination. Student trainees on developmental disabilities require that there be a center and laboratory, where the best practices are used and demonstrated. The PR-IDD has developed three direct service project sites that allow and promote student practice, internship, rotation, and direct intervention of long term (300+hrs) and short-term trainees from various disciplines, including the Graduate Certificate on DD and Early Intervention trainees. All three Projects are related to the health and well-being of children. CEDI is a child development center for babies from 2 month to 3 years with Child Care Funds; CDP is a preschool development center for children from 3 years to 5 years with funds from our University; and the PR-F2F Center is a family-to-family center for families and children with special heath care needs from zero to 21 years old with funds from HRSA. CEDI and the CDP are child development centers for the care and development of infants in an inclusive environment integrating family-centered services that are served to provide developmental support for the children and their families. The PR-F2F Center mission is to support families in the process of seeking health services and empowerment for children with special health needs and/or DD through peer-to-peer family-centered service. The three project sites also offer interdisciplinary training, research/evaluation, community service and dissemination services with student involvement. Dr. Carol Sala’s Institute of Developmental Disabilities efforts provide an example of how service centers provide service and practice opportunities within and outside students’ curriculum activities.

- 5) Select at least three of the following indicators that are meaningful to the school or program and relate to service. Describe the school or program's approach and progress over the last three years for each of the chosen indicators. In addition to at least three from the list that follows, the school or program may add indicators that are significant to its own mission and context. Schools should focus data and descriptions on faculty associated with the school's public health degree programs.

TABLE E5.5.a GSPH Outcome Measures for Faculty Research and Scholarly Activities AY 2017-18 to 2019-20				
Outcome Measure	Target	AY 2017-18	AY 2018-19	AY 2019-20
Percent of PIF faculty with reported extramural service activities.	60%	50%	69%	68%
Number of student/faculty service collaborations ¹	35	47	31	17
Public/private partnerships for engagement and service	25	28	38	41
¹ Refers to number of community impact activities with student participation which is the data collected in semester reports by the GSPH.				

6) Describe the role of service in decisions about faculty advancement. (self-study document)

A general description of the criteria and procedures used by the institution for faculty advancement (tenure status and/or promotion) is described in the UPR-MSU Faculty Evaluation Instruction Manual. Special Service is one of the areas evaluated in tenure and promotion decisions. In the final evaluation of the faculty member requesting advancement the service component is weighed based on the distribution of service activities in the faculty member's academic load for the years being evaluated. The distribution is agreed to by the faculty member and the department chairperson. The special service component is evaluated in four areas: importance of service contributions to service participants (21%), quality which is evaluated based on its academic value in the application of knowledge (27%), dissemination activities related to service in relation to its reach, audience and the media used (25%), and productivity based on the quantity of service products and funds (27%).

7) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- GSPH has a strong tradition of service centers and projects, many of which are externally funded, in diverse areas with a wide reach and public health impact.
- GSPH faculty is extensively engaged in service activities that impacts student instruction and provides opportunities for student engagement in service activities.

Weaknesses

Lessons Learned

F1. COMMUNITY INVOLVEMENT IN SCHOOL OR PROGRAM EVALUATION AND ASSESSMENT

The school or program engages constituents, including community stakeholders, alumni, employers and other relevant community partners. Stakeholders may include professionals in sectors other than health (eg, attorneys, architects, parks and recreation personnel). Specifically, the school or program ensures that constituents provide regular feedback on its student outcomes, curriculum and overall planning processes, including the self-study process. With regard to obtaining constituent input on student outcomes and on the strengths and weaknesses of the school or program's curricula:

- The school or program defines qualitative and/or quantitative methods designed to provide useful information.
- Data from supervisors of student practice experiences may be useful but should not be used exclusively.
- The school or program documents and regularly examines its methods for obtaining this input as well as its substantive outcomes.

1) Describe any formal structures for constituent input (eg, community advisory board, alumni association, etc.). List members and/or officers as applicable, with their credentials and professional affiliations. (self-study document)

The GSPH continually engages with external constituents but did not have a formal structure. The GSPH had an advisory committee from 2015 to 2017 composed of distinguished retired faculty. However, this initiative languished after Hurricane María and was not reactivated. As part of the self-assessment process the GSPH identified the lack of a formal structure for constituent input as a weakness. In order to address this shortcoming the GSPH developed a GSPH External Advisory Board by asking academic departments to identify ideal candidates to serve on the advisory board. Department chairpersons, along with their faculty, were asked to identify individuals that represented alumni, employers of alumni, practice sites, student practice preceptors, and research and service collaborators. Among the list the Executive Committee selected individuals that represent the variety of scenarios that employ alumni and with which the GSPH continually collaborates through all its programs. The advisory board members represent: health care organizations, community-based organizations, government agencies, and research partners. Table F1.1 lists the current members of the GSPH External Advisory Committee.

TABLE F1.1 GSPH External Advisory Board Members		
Name	Organization	Position
Lic. Leonardo Pérez	Diabetes Prevention and Control Program, Puerto Rico Department of Health	Director
Dr. José Rodríguez Ramos	Castañer General Hospital	Medical Director
Lic. José Valentín Camerón	First Medical of Puerto Rico	Executive Director
Dr. Mercedes Rivera	Center for Urban, Community and Entrepreneurial Action of Rio Piedras (CAUCE)	Executive Director
Lic. Janice Maymí	Medicaid Fraud Control Unit, Department of Justice	Attorney
Ms. Rosalie Ayala	Puerto Rico College of Health Educators	President
Mr. Eduardo Lamadrid	American Heart Association - Puerto Rico	Community Impact Director

TABLE F1.1 GSPH External Advisory Board Members		
Name	Organization	Position
Sr. José DeLeón Rodríguez	Private Practice	Alumni Representative
Dr. Milton Martínez Gómez	Puerto Rico Vaccination Program, CDC	Coordinator

The External Advisory Board was constituted recently. It has had two meetings. The first was to constitute the board and approve its bylaws. In the bylaws the Board is set to have two regular meetings a year in January and during the Summer. These meetings occur after the GSPH bi-annual meetings to present the assessment and progress data presented to the faculty and receive their input. The bylaws allows the Dean to convene extraordinary meetings for important issues and decisions for which external advisory input is desired such as the development of new strategic plans. The second meeting was conducted in August after board members were given the GSPH preliminary Self-Study. In this meeting data and information of the GSPH Self-study were reviewed and input was solicited and gathered from the board. The next regular meeting is scheduled for January of 2022.

2) Describe how the school or program engages external constituents in regular assessment of the content and currency of public health curricula and their relevance to current practice and future directions. (self-study document)

The GSPH has formal assessment methods for receiving input about currency of public health curriculum and its relevance to public health practice. The two main sources are the annual alumni survey (see **Criteria B4: Table B4.1**) and the employer assessment carried out every five years (see **Criteria F1.3.d**). One of the main objectives of the employer assessment is to elicit recommendations for strengthening the curriculum.

The GSPH engages external constituents continually through various other activities. At the GSPH level, external constituents are integrated in academic program activities through the integrative and practice experiences. These curriculum activities are structured around external constituent needs and community organization representatives participate in student presentations at the end of these experiences. At the end of these integrative and practice experience presentations (at both the MPH and DrPH degrees) external constituents, faculty and students share information about the organization's needs, the benefit of students products, and in many instances, they share recommendations for the curriculum in terms of topical areas and practice skills.

Some programs in the GSPH also have formal meetings with professional organizations. For example, the Public Health Education program meets annually with the Puerto Rican Association of Health Educators. The Health Services Administration Program also has structured meetings with external constituents such as the College of Administrators, and the Puerto Rican chapter of the American College of Health Care Executives. In these meetings programs receive input about professional needs and incorporate recommendations in academic programs to meet professional needs in Puerto Rico.

3) Describe how the program's external partners contribute to the ongoing operations of the school or program. At a minimum, this discussion should include community engagement in the following:

a. Development of the vision, mission, values, goals and evaluation measures

The Strategic Planning Committee (COPE) is charged with leading the process of the development of the GSPH's strategic plans every five years. As part of this process the vision, mission, values, goals, and evaluation measures are reviewed. This process involves a series of activities with participation of various sectors relevant to the school and stakeholders. For the development of the current GSPH Strategic Plan 2017-2022, COPE conducted 10 group discussions with various sectors including, students, staff, faculty, retired faculty, and alumni who worked as public health practitioners offering community services. This last group helped provide input that connects the GSPH curriculum with community public health needs. Through these discussion groups information was gathered about the GSPH's strengths, challenges, weaknesses, opportunities and threats. These discussion groups allowed for the development of the GSPH strategic plan. COPE is poised to begin this process again in AY2021-2022, for the development of a new strategic plan since the current one ends the next academic year. Other sources are also used to receive community input. In the recent employer assessment carried out in 2021, one of the focus group discussion questions centered on employers reactions to the GSPH's current vision and mission statements.

b. Development of the self-study document

The Self-study document was developed through various subgroups that were responsible for accreditation criteria grouped by diverse areas (administration, student affairs, faculty affairs, service and research, assessment). The subgroups were composed of faculty members. However, as part of the process the final document was presented to students, alumni and the GSPH External Advisory Board for input and feedback included in the final self-study document.

c. Assessment of changing practice and research needs

Community engagement for the assessment of practice and research needs occur through diverse forums and mechanisms in the GSPH. One of the main mechanisms for community engagement is through the GSPH's Division of Continuing Education and Professional Studies (DECEP - for its Spanish acronym). In **Criteria F3.3** DECEP's engagement with communities to ascertain service needs is detailed. Although the activities of DECEP center on professional development of public health practitioners, its assessments, collaboration agreements, and service activities provide opportunities for the GSPH to remain abreast of changing public health practice needs.

Another source of assessment of practice needs is through the continuous collaborations between the GSPH and its faculty with community organizations. As described in detail in **Criteria E2.1**, the faculty and the GSPH engage in diverse activities through practicums and other curricular activities; collaborations with public health organizations and practitioners; and consultation, advisory and service to public health practice organizations. These activities maintain continuous communication and engagement with practice and research needs in the community. The practice and integrative experience of students in most cases respond directly to identified needs that originate from these working relationships with the community.

Lastly, some service and research units and programs have external advisory committees that provide input about how these initiatives meet community needs and help guide future activities. The following service and research initiatives have external advisory committees:

- Institute on Developmental Disabilities
- Puerto Rico Geriatric Workforce Enhancement Program

- Puerto Rico Test Site for Exploring Contamination Threats Program

d. Assessment of program graduates' ability to perform competencies in an employment setting (self-study document)

The GSPH has two mechanisms for the assessment of graduates' ability to perform competencies in the employment setting. The first source is the annual alumni survey which is implemented with graduate cohorts one year after graduation. The results of the assessment of competencies in the employment setting from the alumni survey is summarized in **Criteria B4 (Table B4.1)**.

The second source comes from employers themselves. Every five years, prior to commencing the process for the development of a new strategic plan, an assessment process is conducted with alumni employers. The GSPH identifies employers of alumni through program coordinators who contact alumni to identify employers, and through practice experience contacts in the program. The method of collecting employer assessment of graduates competencies varies. In 2015 a survey method was conducted that collected information (with participation of 45 employers) in three main areas: profile of organizations in which alumni work; analysis of alumni performance in each competency area; and employer recommendations for curricular improvement. The survey also collected qualitative data on employer recommendations to strengthen the curricula. Employers were selected from different types of organizations including community-based organization, local government, academic, health care organization, health insurance agencies, federal government, hospitals and consulting firms, among others.

The most recent employer assessment of alumni competency was conducted in 2021. The method used in this most recent assessment was a focus group with representation of the most common employers for GSPH alumni. Nineteen employers participated representing the following types of organizations: health insurance companies, local government agencies, primary health centers, community-based organizations, academic universities, and research projects. Focus group discussion centered on four areas: skills employers look for in recruitment; GSPH academic program competency alignment with employer needs; satisfaction with GSPH alumni; and recommendations to strengthen the curriculum. The reports from the last two employer assessments are available in **Electronic Resource File F1.3.d**.

4) Provide documentation (eg, minutes, notes, committee reports, etc.) of external contribution in at least two of the areas noted in documentation request 3. (electronic resource file)

Documentation of external contribution can be found in **Electronic Resource File F1.4**.

5) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The GSPH has a wide variety of community engagement contacts, collaborations and relationships.

Weaknesses

- Formal and systematic mechanisms for active community involvement in assessment and evaluation were lacking in the school.

Lessons Learned

- The GSPH needs to strengthen community involvement in assessment and evaluation in the school. It began addressing this shortcoming with the creation of an External Advisory Board.

F2. STUDENT INVOLVEMENT IN COMMUNITY AND PROFESSIONAL SERVICE

Community and professional service opportunities, in addition to those used to satisfy Criterion D5, are available to all students. Experiences should help students to gain an understanding of the contexts in which public health work is performed outside of an academic setting and the importance of learning and contributing to professional advancement in the field.

1) Describe how students are introduced to service, community engagement and professional development activities and how they are encouraged to participate. (self-study document)

Students are introduced to service, community engagement and professional development activities through various means: (1) student organizations who engage in volunteer and community service activities; (2) the Graduate Assistantship Program that provides students an opportunity to work in faculty research and service activities; (3) community engagement, service learning and practice experiences in the curriculum; and (4) participation in service institutes, centers, programs, and faculty service activities.

For many students, encouragement to participate in service and community engagement begins before the start of their first term of study when they are accepted. During admission interviews prospective students are given information by program faculty about opportunities in the program and school, and once they are accepted, they are encouraged to submit applications for the Graduate Student Assistantship Program. During the orientation process prior to beginning their studies they are introduced to the GSPH Student Council and other student organizations in departments and programs. Student members in these organizations provide information to newly admitted students about opportunities for volunteer and service activities that have been done in the past to encourage registration and participation. During the course of student's time in the GSPH they are continually being encouraged to participate in all of the service and community engagement opportunities in the school. This occurs during academic and professional advising, in the context of courses, and through program, department and school announcements. The school announces and encourages student participation in talks, conferences, volunteer opportunities, and community activities through bulletin boards, social media and school generated e-mails that reach all student institutional accounts. Program coordinators and faculty continually encourage student participation, especially through program or department organizations. The Assistant Dean of Student Affairs has a key role by maintaining continuous communication with student organizations and recommending and supporting student initiatives. Moreover, the GSPH Student Council president is part of the Administrative and Academic Affairs Committee and is always included in the agenda to inform about student activities and ensure support. In these meetings faculty sometimes solicit support of the Student Council to disseminate initiatives or to recommend potential opportunities.

Student opportunities to participate in faculty and school center and program service activities is described in **Criterion E5.4** with examples. This section details the opportunities for student service that are offered by student organizations.

The principal vehicle for bringing together the different aspects of service, community engagement and professional development, is the GSPH Student Council and other student associations. Student organizations have always demonstrated a commitment to improving health and access in under-served communities throughout Puerto Rico through collaborations with faculty, students, staff, and external community groups. Students organizations in the school have always assumed a leadership role in

coordinating and implementing activities toward this goal (examples of these activities are provided in **Criteria F2.2**).

Besides the GSPH Student Council, the school has 10 active student organizations. These organizations vary in their scope and membership eligibility, but all have service and community engagement as one of their key activities. The school's active student organizations are: (1) Biostatistics and Epidemiology Student Association; (2) Industrial Hygiene Student Association; (3) Environmental Health Student Association; (4) Health Education Student Association; (5) Nutrition and Public Health Student Association; (6) Gerontology Student Association; (7) Demography and Population Studies Student Association; (8) Research and Evaluation Program Student Association; (9) Queer Diversity Alliance; and (10) General Public Health Student Association. Each student organization has a faculty advisor and mentor that supports student activities. Each student organization coordinates and carry out activities throughout the academic year focused on service and community engagement with the support of the Assistant Dean of Student Affairs Office and the organization's advisor. Students are introduced to these organizations through academic program promotional material, newly admitted student orientations, by program faculty, bulletin boards, flyers on high-transited area on campus, student's list serve, social media, and by an online list of all student associations on campus prepared and updated by the Assistant Dean's Office.

2) Provide examples of professional and community service opportunities in which public health students have participated in the last three years. (self-study document)

Examples of formal student professional and community service opportunities with faculty through Graduate Student Assistantship Program and the school's service centers and programs are described with examples in **Criterion E5.4**. This section provides example of professional and community service that originate from the Student Council, student organizations, and student led initiatives.

Over the past three years GSPH students have participated in three key service opportunities. These initiatives have been the student and school Hurricane María Support activities in 2017, the Brigadas Salubristas (Health Brigades) initiative and the RCM Vital initiative.

In September of 2017, Hurricane María devastated communities throughout Puerto Rico, especially rural and underserved communities. In Hurricane Maria's wake, the whole power grid of the island went down, some communities became inaccessible, for many communities access to safe running water became a challenge, there was limited access to foodstuffs and essentials, and limited access to services including medical and health services. There was a public health crisis that lasted months and even years for many segments of the population. Students promptly organized themselves in collaboration with faculty, staff, and GSPH Collaborators, to provide emergency assistance to some of the most affected communities throughout different municipalities in Puerto Rico. Through MSC and GSPH contacts inside and outside of Puerto Rico aid was organized. Twenty-eight (28) affected municipalities were impacted with interventions such as potable water delivery and water filter systems distribution, workshops and written educational materials on how to purify water, and delivery of non-perishable foodstuffs and essentials. Other services provided to the communities were: health services in collaboration with the School of Medicine, dental clinics in collaboration with the School of Dental Medicine, and mental health services in collaboration with the UPR-Rio Piedras Campus, and Carlos Albizu University. Some municipalities were visited more than once. GSPH were an integral part of these efforts. Although GSPH students have always been involved in community involvement and service activities, the students experience related to Hurricane Maria was unique. The situation allowed students to provide life-line support with limited resources and under extremely difficult conditions which gave them hands-on experience on how to

respond to a major crisis. Moreover, they experienced firsthand the value of collaborations with members of public and private entities and international organizations. The experience with Hurricane María gave rise to two initiatives that continue today. The *Brigadas Salubristas* and *RCM Vital en tu Comunidad*.

The *Brigadas Salubristas* developed organically during Hurricane María's response. Dr. Heriberto Marín and Dr. Ralph Rivera (faculty of the Health Administration Department) took a leading role in connecting student volunteers, volunteer faculty from other schools, and community organizations. The initiative divided volunteers in groups of 10 to 15 which included faculty and students from various professions from the MSC, including public health and other schools with a clinical focus (Medical School, Nursing School, Pharmacy School, and others). These groups communicated and collaborated with community leaders and the community itself. Every activity would pre-identify an area of the community in order to offer health clinics, health education/promotion, and mental health services. Each brigade would be assigned to previously identified sectors. A community leader would be assigned to guide them to the houses of community members. During the visits, the *Brigadas Salubristas* would bring essential supplies, like drinking water, nonperishable food, hygiene products, batteries, and solar lamps to families in the most affected communities and would teach them how to use them. According to the data collected from the towns of Utuado and Jayuya, each brigade could reach 20 to 30 homes daily. In total, each activity by the brigades reached between 200 to 300 people per day. Additionally, through the health clinics, they were able to tend to more than a hundred people from the community. Even though the origin of the *Brigadas Salubristas* was spontaneously created by members of the RCM community, it turned into a voluntary and collective effort from the community. As a result, in April of 2018, the *Brigadas Salubristas* became a non-profit organization with the goal of becoming a national project, not only to provide immediate response after natural disasters and emergencies, but also to create a long-term impact on the health and well-being of communities. The *Brigadas Salubristas* stopped being an initiative of the EGSP in order to become a community project. Faculty from the GSPH are still involved with this initiative and it provides students with an opportunity to volunteer and gain valuable service experience and skills that have a positive impact in the community. The activities of the *Brigadas Salubristas* were many over a prolonged period of time and given prevailing conditions during hurricane recovery efforts the exact number of students that participated was not recorded but estimates of student participation from the GSPH are between 30 and 40 students.

RCM Vital en tu Comunidad is an annual one-day community outreach event conducted from 2017 to 2019 (it is on hold since 2020 because of COVID-19 restrictions). It has been held in *Plaza Las Américas*, the largest shopping center in the Island, and in the UPR Campuses of Humacao and Ponce. It serves as a health-focused community engagement and professional service project that evolved from an initiative originally created as part of Hurricane María's response efforts. The initiative was developed by the MSC Student Council who take the lead in coordinating this inter-professional activity with MSC students and faculty from all 6 schools. It serves the surrounding communities by providing free clinical services and health promotion and education activities pertaining to MSC academic programs. The GSPH Student Council and student organizations have been active participants in these activities and an estimate of 20 to 30 students participate in each of these large activities. Students have a leading role in the coordination and implementation of the event.

The GSPH Student Council also organizes an annual activity during National Public Health Week (NPHW). Students organize a planning committee comprised of a representative of each of the student organizations in the school. This group, run by students and under the guidance of the GSPH's Office of Student Affairs, is charged with developing a program of activities during the week. These activities include professional service and development activities, and coordination of speakers on various public

health topics including guest speakers from community organizations, public health experts and practitioners. The NPHW planning committee also develops community service activities during the week as part of the initiative.

The school's department and program student organizations also organize professional development and service activities based on their interests and disciplinary or population area of concentration. Some examples include:

- During AY 2017-2018, GSPH student organizations planned several activities to celebrate the 2018 National Public Health Week under the theme of: *Vive tu Salud Pública, Juntos en la Comunidad* (Live your Public Health, Together in the community). Examples of two activities are listed as follows:
 - The Nutrition and Public Health Student Association organized a talk on food security. It was held in the GSPH with open access to the campus community. The speaker was Dr. Myrna Comas Pagán, former Secretary of the Puerto Rico Department of Agriculture. She addressed and discussed food security issues that were particularly relevant because of Hurricane María's aftermath.
 - The Health Education Students' Association coordinated a one-day community health fair titled "*Juntos en la Comunidad*" (Together in the community) in the María Montañez Gómez public school in the *Las Carolinas* community of Caguas. This is a school that was closed by the government and the community has been using it as a community service center. GSPH volunteer students provided health information and educational demonstrations on varied topics, including sexual and reproductive health, low sodium diets and cardiovascular health, and chronic disease management and control. Students also organized recreation and physical activity games for community children. Special workshops were offered by community resources and a community older adult group presented a showcase of their handcrafts which were available for purchase at a low cost.
- Environmental Health Student Association: In AY 2019-20 they organized a visit to the agrotourism project of community-based organization COSSAO in the municipalities of Utuado, Ciales and Jayuya. Students learned about tourism and economic development from an eco-friendly and environmental health perspective.
- The Gerontology Students Association coordinated a workshop on older adults and covid-19. Led by students they offered strategies for working with older adults during the covid pandemic to reduce virus infection risk. In previous years students have organized health promotion service activities in older adult independent living facilities.

Student participation in these activities vary depending on the scope of the activity, the number of program associations involved and the number of students in each program or department association. For example in the "*Juntos por tu Comunidad*" activity which gathered students from different organizations participation was between 20 to 30. In smaller activities like that of the Gerontology Students Association which are smaller in scope active participation in organizing and delivering the activity is around 5.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The GSPH is strongly committed to public health community and professional service activities consistent with its mission.
- Students in the GSPH have diverse opportunities for professional service and community service. These range from institutional, service program, department/program, faculty and student led opportunities.

Weaknesses

- Student organization coordinate a variety of activities but formal documentation of these activities needs to improve.

Lessons Learned

- The GSPH is highly involved in service activities. However, more dissemination of these activities will be encouraged within the School, Medical Sciences Campus, and the community.
- There is a need to improve data collection of extracurricular service activities from faculty and especially from student organizations. The GSPH is working to improve the systematic documentation of student extracurricular activities.

F3. ASSESSMENT OF THE COMMUNITY'S PROFESSIONAL DEVELOPMENT NEEDS

The school or program periodically assesses the professional development needs of individuals currently serving public health functions in its self-defined priority community or communities. Examples could include periodic meetings with community members and stakeholders, formal or informal needs assessments, focus groups with external constituents, surveys that are administered or co-administered to external constituents and use of existing data sets.

1) Define the school or program's professional community or communities of interest and the rationale for this choice. (self-study document)

The GSPH is committed to promoting professional development and excellence in public health by offering continuing education activities for over four decades through the GSPH's Division of Continuing Education and Professional Studies (DECEP, for its Spanish acronym). The school also has workforce training centers and programs which focus on training Puerto Rico health professionals to better address the needs of specific populations such as: children with developmental disabilities, maternal and child health, and older adults. These initiatives are described in **Criteria F4**. All professional development activities are centered on Puerto Rico public health practitioners and health professionals across the island. The GSPH provides professional development opportunities for health professionals to meet continuing education licensing requirements in Puerto Rico.

The GSPH professional development activities serve Puerto Rico's public health practitioners' professional development. The primary goal of these initiatives is to enhance the professional expertise of GSPH alumni, health professionals, and human services personnel across Puerto Rico in order to update and develop their public health and professional knowledge and skills. The DECEP is certified as a continuing education provider by the Puerto Rico Department of Health's Office for Health Professionals Credentialing, the Puerto Rico Physicians Board of Examiners, and the Puerto Rico Social Workers Association. DECEP designs courses with the goal of providing timely and current public health knowledge, approaches, and skills in public health and other general areas related to health. DECEP contributes to ensuring the excellence of public health practice in Puerto Rico by designing and offering training activities, and facilitating the process of certification of continuing education credits to Puerto Rican health professionals and non-licensed personnel in public and private entities. Among the entities that benefit from professional development activities are hospitals, private and public service agencies, professional associations, and community-based organizations across the island.

2) Describe how the school or program periodically assesses the professional development needs of its priority community or communities and provide summary results of these assessments. Describe how often assessment occurs. Include the description and summary results in the self-study document and provide full documentation of the findings in the electronic resource file.

The assessment of professional development needs is a continuous process in the GSPH through various assessment practices. The primary responsibility of professional development needs assessment lies in the GSPH's Division of Continuing Education and Professional Studies (DECEP). Three different assessment sources and techniques are used. The first source is a professional development needs assessment survey of potential participants in order to plan activities and offer relevant topics for the professional

development of public health practitioners. These need assessment surveys are conducted every two years in order to have adequate time and resources to plan activities based on the findings. The most recent survey was conducted in AY 2020-2021 among MSC Workforce Professionals. The survey participants were 260 licensed and other health professionals from disciplines related to public health. The survey gathered information on issues pertaining to professional development. Among the information collected through this needs assessment survey are: profile of potential participants including profession; continuing education credentialing needs; activity modality, design and scheduling preferences; public health area training interests; and public health issues and topic training needs and interest. **TABLE F3.2.a** provides a summary of some of the results from the most recent professional development needs assessment. Refer to **Electronic Resource File F3.2.a** for Needs Assessment Report.

TABLE F3.2.a Summary of DECEP Professional Development Needs Assessment AY 2020-2021	
Criteria	Results
Respondent Profile	<ul style="list-style-type: none"> • 79% Female • 22.2% were alumni from the GSPH • 98% licensed professionals
Professional Development Needs	<ul style="list-style-type: none"> • 56.13% participate in professional development activities at least once every four months (Trimester) • 98.8% work in a profession that requires a professional certification as established by the Department of Health.
Activity delivery Preferences	<ul style="list-style-type: none"> • 39.7% prefer in-person activities and 41.39% online activities. • 71.3% are interested in Professional Studies Certificate Programs with preference in the following areas: <ul style="list-style-type: none"> ○ Aging – 35.11% ○ Public Health Emergency Preparedness – 34% ○ Disease Epidemiology – 29.2% ○ Developmental Disabilities – 23.4% ○ Bioethics in Public Health – 13.3%
Top Areas of Public Health Training Interest	<ul style="list-style-type: none"> • Mental Health – 56.3% • Health Education – 31.98% • Gerontology – 29.7% • Health Promotion – 28.8% • Developmental Disabilities – 28.3% • Sexual Health – 27% • Epidemiology – 26.5%
Top Public Health Issues Training Interest	<ul style="list-style-type: none"> • Use of Technology in Health – 53.8% • Chronic Health Conditions – 43.4% • Personnel Supervision – 38.9% • Adolescent Suicide – 38.9% • Health Worker Burnout – 37.5% • Adolescent Sexual Health – 37.1% • Coaching – 35.7% • Special Populations- 35.2%

The second source used by DECEP in assessing professional development needs are public health organizations, agencies or institutions in the public, private and academic sectors themselves. These

organizations conduct their own needs assessments and contact the DECEP to assist in developing instructional designs and activities to meet the petitioning organization's identified needs. Continuous collaboration with, and professional service for, these external organizations help the GSPH to remain current with these organizations' needs and the health professionals they represent. Addressing these service petitions and maintaining collaborative agreements (Refer to **Electronic Resource File E3.2.b** - List of DECEP collaborative agreements) also allows the GSPH to keep abreast of professional development needs, interests, and trends. Among the organizations that have a collaborating relationship with DECEP are:

- *Community Based Organizations (CBOs) and professionals* – Puerto Rico Health Educators Association, Puerto Rico Oncology Nurses Association, Society of Pneumologists of Puerto Rico, Chiropractors Association of Puerto Rico, College of Physicians Surgeons of Puerto Rico, and Taller Salud, among others.
- *Public Sector Agencies* – Puerto Rico Department of Health, Administration of Mental Health Services and Addiction (ASSMCA), Health Services Administration (ASEM), Families and Children Administration, State Council on Developmental Disabilities, *Oficina de Administración y Transformación de los Recursos Humanos del Gobierno de Puerto Rico (OATRH)*, *Corporación del Fondo del Seguro del Estado (CFSE)*, Department of Education of Puerto Rico, , and examining boards of several health professions among others.
- *Private Organizations* - APS Healthcare, Triple S, First Medical, Inc, Med Cann Foundation, Inc., Proyecto Lacta at Ashford Presbyterian Hospital, Doctors Center of Manatí, MSO de Puerto Rico, Ana G Méndez University, Interamerican University, *Asociación de Facturadores de Puerto Rico (AFAMED)*, UMED, LLC, Mind, LLC, *Asociación de Profesionales de Salud de Servicios en el Hogar (APSSH)*, DISS de Puerto Rico, *Asociación de Hipnosis de Puerto Rico* among others.
- *Internal Academic Sector (Inside Graduated School of Public Health Services Programs)*- PREVEN, Gerontology Training Institute, PRGWEP, Institute of Developmental Disabilities (IDD) among others.
- *External Academic Sector (Other MSC or UPR schools)* – School of Medicine, Department of Psychiatry, Comprehensive Cancer Center, Dental Medicine School, and campus and other Schools Continuing Education Divisions.

DECEP's third source of professional development assessment information is collected through the evaluation of activities. At the end of each training offered by DECEP, every participant completes an evaluation form which includes a section on interests for future training activities. This assessment tool consists of five core components: (1) general criteria for development of the methodology, applicability, and satisfaction, (2) criteria and indicators to measure the achievement of the objectives, (3) criteria to measure the speaker(s) performance (4) topics and issues of interest for future activities, and (5) any other additional comments. DECEP uses formal evaluation and assessment instruments developed by the DECEP which comply with the guidelines set by the Puerto Rico Department of Health's Office for Health Professionals Credentialing (ORCPS, Spanish acronym), the Puerto Rico Physicians Board of Examiners (JLDM Spanish acronym), and the Puerto Rico Social Workers Association. Template and samples of DECEP activity evaluation and assessment instrument available in **Electronic Resource File E3.2.c**.

Another source of professional development in the GSPH are institutes and programs with workforce development responsibilities (described in **Criterion F3**). These workforce development initiatives respond to the goals of the sponsoring agencies that fund them or the purpose/need for which they were created (i.e. compliance with Puerto Rico workforce training laws). Sponsored institutes and projects have external advisory committees that ensure that training activities within these entities respond and meet

workforce needs of their targeted populations and interest areas. They also conduct internal program and activity evaluations that guide their activities.

The last mechanism of workforce development in the GSPH are professional and graduate certificate programs (described in **Criterion F3**). The GSPH's certificate programs are formal academic credit curriculums and must comply with the same rigorous academic standards in their development as other GSPH degree programs. Each program was created with a proposal that contained an evaluation of external needs to justify the program. During implementation, the assessment of the certificate programs' response to workforce development needs are the same as with the school's degree programs through student evaluations of courses, exit interview surveys and the curricular review and revision process. However, the DECEP needs assessment provides information relevant to the currency and interest in these offerings as a high-level assessment and monitoring mechanism.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The GSPH has robust, varied, and continuous mechanisms for the assessment of the public health workforce professional development needs. Through bi-annual needs assessments, direct and formal collaborations with public, private, and community-based service and professional organizations, and training activity evaluations, the school ensures that its activities respond to development needs in a timely and effective way. Moreover, the input of needs assessment developed of service-oriented units in the school provide a strong framework to address the training needs of the Puerto Rico public health workforce.

Weaknesses

Lessons Learned

F4. DELIVERY OF PROFESSIONAL DEVELOPMENT OPPORTUNITIES FOR THE WORKFORCE

The school or program advances public health by addressing the professional development needs of the current public health workforce, broadly defined, based on assessment activities described in Criterion F3. Professional development offerings can be for-credit or not-for-credit and can be one-time or sustained offerings.

1) Describe the school or program's process for developing and implementing professional development activities for the workforce and ensuring that these activities align with needs identified in Criterion F3. (self-study document)

The GSPH delivers professional development opportunities through three main mechanisms: the GSPH's Division of Continuing Education and Professional Studies (DECEP); service units and programs with workforce development goals; and professional and graduate certificate programs. Each one of these professional development opportunities is described below. The DECEP is certified as a continuing education provider by the Puerto Rico Department of Health's Office for Health Professionals Credentialing, the Puerto Rico Physicians Board of Examiners, and the Puerto Rico Social Workers Association. As an authorized provider of continuing education credits for professionals licensed by the Department of Health of Puerto Rico, the unit coordinates and delivers training activities that both serve as requirements for professional license renewal as well as other activities of interest for strengthening public health practitioner's knowledge, competencies, and skills.

GSPH's Division of Continuing Education and Professional Studies (DECEP)

GSPH's Division of Continuing Education and Professional Studies (DECEP) is the school's main vehicle for delivery of health professionals workforce development. The division responds to the institutional policy and strategic vision for the UPR DECEP's (UPR Board of Trustees Certification #190 in June 2001). This policy clearly defined that schools were responsible for identifying recurrent funds to warrant the efforts of these units toward the professional development of the public health workforce. The DECEP is still at present a self-financed entity with the school. DECEP excels in its training program due to the variety of topics offered. A list of DECEP activities and topics of the past three years available in **Electronic Resource File F4.2**.

DECEP develops activities based on three main sources of assessment of needs. The first source are activities developed internally by DECEP to respond to professional needs and interests identified in the needs assessment conducted every two years and those identified in training activity evaluations. The second source are activities that respond to direct requests by public, private, service, professional and community-based organizations. For these activities' organizations share their needs based on their internal assessments. DECEP prepares instructional designs for submission to the relevant credentialing and licensure body and helps coordinate activities. As part of this process, and given DECEP's close relationship with licensing boards and collaborations with service organizations, the unit also responds directly to new requirements for licensure renewal. For example, in 2018-2019, it joined two other continuing education divisions on campus (Central Academic Affairs Division and School of Health Professions Division) to offer CE activities that incorporated new requirements for renewal of professional licensure of physicians. A total of 667 health professionals of the Department of Education received 6

contact hours of training. Finally, DECEP responds to the needs identified by service units and programs within the school based on their internal assessments and needs. The continuing education unit may assist in different capacities depending on the needs and resources of the school's service unit. It may prepare instructional designs, submit required documentation for continuing education credit approval from licensure boards, and/or coordinate and deliver training activities.

GSPH Service Units and Programs that Provide Professional Development Opportunities

The GSPH has established service units and programs that design, develop, and deliver professional development opportunities. These service units and programs respond to their initial service proposal goals and sponsoring agency requirements. These internal entities of the school in many instances collaborate closely with DECEP in many of their training activities. The GSPH service units and programs are detailed below.

Institute on Developmental Disabilities (IDD) - The Puerto Rico University Center for Excellence in Developmental Disabilities (PR-UCEDD) - The IDD seeks to enhance the quality of life of individuals with intellectual and developmental disabilities and their families. The IDD- PR-UCEDD has been an Administration for Intellectual and Developmental Disabilities grantee for the last 29 years. Its goal is improving access and quality of services to promote full participation of people with IDD in all aspects of the community and society. The objectives are: 1) Increase the quantity and quality of interdisciplinary professionals in the workforce of Puerto Rico who provide services to populations with IDD; 2) Provide training and Technical Assistance to government agencies and community based organizations; 3) To conduct basic and applied research, program evaluation and policy analysis; 4) Disseminate culturally appropriate curricula and training materials, research reports and other information related to intellectual and developmental disabilities. The IDD provides a wide variety of training opportunities to professionals such as social workers, speech, occupational and physical therapists, and psychologists among other health professions. Some training activities are implemented in collaboration or supported by DECEP.

The Gerontology Training Institute (IAGERO, Spanish acronyms) – IAGERO is an entity attached to the Gerontology Program of the GSPH. Puerto Rico Law Number 157 of 2008, requires that all employees and professionals (direct care workers) who work in older adult service institutions have a certification of 30 hours of training in aging and the provision of services to this population. It requires further that these direct care workers receive recertification training equivalent to 6 hours every two years. The IAGERO was created to fulfill this need. It is licensed by the Puerto Rico Department of the Family to offer certification and recertification training activities for compliance with Law Number 157 of August 8, 2008. IAGERO also provides other training activities based on identified community needs and opportunities. For the past fifteen years the IAGERO has delivered trainings to more than 4,000 participants of all academic levels and service scenarios. Among the groups served are individuals and public, private, for profit, and non-for-profit organizations. IAGERO organizes and coordinates training activities by its own initiative or to organizations that request its service. For example, IAGERO has offered its 30hour Certification for the Development of Competencies in Older Adult Care to service personnel in municipal government agencies. This includes personnel in municipal government administered senior centers. The principal target of trainings are professionals, staff and personnel in senior centers, older adult living facilities, and home care service companies. Training activities designed specifically for health professionals are also offered. The main training offerings of IAGERO are the 30hour Certification for the Development of Competencies in Older Adult Care (Law 157 2008 certification); A 48 hour training course in Management of Older Adult Care Facilities for people interested in developing (or who already operate) a care home; and an Alzheimer's Disease series of conferences for health professionals. IAGERO activities for the past

two academic years have been subsumed into the Geriatric Workforce Enhancement Program since it is a central collaborating partner in the implementation of this sponsored initiative.

Puerto Rico Geriatric Workforce Enhancement Program (PRGWEP) – The PRGWEP is a program financed by the Health Resources and Services Department since AY 2019-2020. It is an initiative that combines faculty from the Department of Health Services and the Gerontology Program along with the IAGERO. Three of its five aims are related to workforce development: 1) Implement an interprofessional gerontological education program for geriatric specialists, primary care providers, and health professions students, residents, fellows, and faculty able to assess and address the health needs of older adults. 2) Provide a community-based training program for patients, families, caregivers, and direct care workers that provides the knowledge & skills to improve health outcomes and quality of life; 3) Implement a comprehensive Alzheimer Disease and Related Dementias (ADRD) training program for patients, families, caregivers, direct care workers, healthcare providers, and health professions students, residents, fellows, and faculty through community support networks. To this end the PRGWEP has designed and implemented a wide array of training and workforce development opportunities for all targeted groups in a variety of aging related topics including two 48-hr online trainings in “Gerontology and Primary Health” and “Alzheimer’s Disease and Related Dementia Care” for health professionals. It has also implemented trainings for direct care workers offered by IAGERO. A variety of other training opportunities which include talks, webinars, online learning modules, among others are offered. The program also provides technical assistance and training for Federally Qualified Health Centers to improve older adult service and care capacity and in implementing age-friendly care principles.

Graduate and Professional Graduate Certificate Programs

The GSPH has four graduate and professional certificate programs. These programs are designed as curriculums with academic credit courses that are based on professional competencies which are assessed. They are designed as interdisciplinary and interprofessional curriculums for health professionals in the field, or in formation, that are interested in acquiring competencies that can help them apply their base profession to the specific population or issues around which the program is designed. These programs have the same rigorous standards as the school’s degree programs with admission criteria, and curriculum and completion requirements (including required minimum GPA for completion). They also contain practice experiences at the end of the program. These professional development offerings are aligned with the needs and interests identified and monitored by the GSPH. As identified in DECEP’s Professional Needs Assessment (see **Table F3.2.a**), 71.3% of health professionals surveyed were interested in professional studies certificates. Their preference in areas for these professional development opportunities are aligned with those offered in the school (Aging – 35.11%, Developmental Disabilities 23.4%, and Bioethics in Public Health 13.3%). The GSPH’s graduate and certificate programs are described below.

Graduate Certificate in Developmental Disabilities – Early Intervention - The Graduate Certificate in Developmental Disabilities has an interdisciplinary and transdisciplinary approach to intervention, with emphasis on prevention, rehabilitation, and family participation. It also has a strong component of hands on experiences with a significant number of hours devoted to field experiences in programs servicing children 0 to 5 years of age who present developmental delay or who are at risk. Students come from various disciplines such as speech pathology or speech therapy, occupational therapy, physical therapy, education (regular, special, or early), medicine, nursing, rehabilitation counseling, social work, psychology, law, and administration. Students need a minimum of a bachelor’s degree and work experience. The

academic offering consists of 26 credit-hours in evening courses and a practicum of 114 hours focused on services, coordination of services, and public policy. The duration of the program is one year. The courses include public health and developmental disabilities, typical and atypical development, working with families, service provider systems, assessment and evaluation of children, and early intervention program evaluation. During the last quarter, students can select an area of emphasis or “special tract” in (a) services coordination, (b) public policy, and (c) management of conditions and specific risks. Students receive the certificate after successfully completing coursework and practicum.

Graduate Certificate in Gerontology - The Graduate Certificate in Gerontology trains professionals from diverse health disciplines and develops competencies that contribute to enhance the quality of life and care to the older adult population. The program is focused on improving the professionals’ knowledge, skills, attitudes, and understanding of the aging process by offering content focused on the biological, psychological, social, clinical, administrative and policy aspects related to the aging process. Students are required to have completed at least a bachelor's degree and have a minimum of 3 credits in (a) social sciences, (b) biology, and (c) psychology. This Graduate Certificate in Gerontology is a one year, 20-credit-hour educational offering that promotes a holistic perspective for the delivery of health services to the older adult population through an interdisciplinary health team approach. The courses offered include interdisciplinary intervention, biological, clinical, social, and psychological aspects of aging, and management of gerontology programs. Students receive the certificate after completing coursework and achieving a satisfactory rating in their interdisciplinary intervention.

Certificate of Professional Studies in Maternal and Child Health - The Certificate of Professional Studies in Maternal and Child Health is an online offering as part of a collaboration between the Human Development Department and the DECEP. It consists of a one year 17-credit curriculum of five core courses and an elective. The certificate program was designed for the development of professional competencies in maternal and child health based on MCH Leadership Competencies Workgroup. Courses include fundamentals of maternal and child health, reproductive health, public policy and advocacy, and bioethical aspects. This program was implemented in AY 2019-20 and is offered annually.

Certificate of Professional Studies in Bioethics - During the 2011-2012 academic year the DECEP established a joint initiative with the Institute of Bioethics leading to the creation of the Certificate of Professional Studies in Bioethics. The main goal of the certificate is to train university faculty and other professionals, in the knowledge, skills, and attitudes necessary to incorporate the content of bioethics in the curricula. It also seeks to develop leadership in public policy formulation taking into consideration bioethical principles and ethical responsibility. The curriculum of the Certificate of Professional Studies in Bioethics has five core theoretical courses in the field of bioethics, for an equivalent of 15 credits. It also has a 3-credit workshop as a culminating experience and integrates the concepts acquired in the program of study, for a total of 18 credits completed during one academic year. The courses integrate the nine core content areas of bioethics proposed by American Society of Humanities and Bioethics (ASHBb, 1998, 2003) and develops the basic skills needed to be a consultant on the topic as has been established by the organization. Unlike the school’s other certificate programs this certificate is not offered annually. It is offered every two or three years when in consultation with the MSC Institute of Bioethics a need and population for its offering is identified.

- 2) Provide two to three examples of education/training activities offered by the school or program in the last three years in response to community-identified needs. For each activity, include the number of external participants served (ie, individuals who are not faculty or students at the institution that houses the school or program). (self-study document)**

The GSPH offers a wide variety of education and training opportunities each year across the variety of service units and programs with workforce development goals. During academic years 2018-2019, 2019-2020, and 2020-2021 (first semester), the GSPH DECEP developed a total of 262 training activities for a cumulative 2,090 contact hours (**TABLE F4.2.a**). These activities reached a total of 18,695 participants. Ninety eight percent of the participants applied for a certification of continuing education credits. The largest number of activities was reflected for academic year 2018-2019 with 56% (10,565) of the total training participants for three years. The following table presents information related to DECEP's workforce training activities. (Refer to **Electronic Resource File F4.2.a** for Continuing Education Activities Offered, AY 2018-2019 to 2020-2021).

TABLE F4.2.a. DECEP Training Activities: AY 2018-19 to 2020-21*				
Academic Year	Activities	Contact/ Credit Hours	Number of Participants	Number of Participants that requested Continuing Education Credits
2018-2019	178	1,021.0	10,565	10,565 (100%)
2019-2020	76	945.5	6,432	6,102 (95%)
2020-2021	8	123.5	1,696	1,696 (100%)
TOTAL	262	2,090	18,695	18,363 (98%)
*Includes only training activities of the first semester.				

The professional development activities in **TABLE F4.2a** provided continuing education credits for physicians, nurses, social workers, and health educators and among others. Recent topics have included Transmissible Respiratory Diseases: Coronavirus; Prevention of Chronic Diseases; Diabetes prevention, management, and treatment; and Cervical Cancer, among others. Activities were delivered through a variety of mechanisms including face-to-face conferences and workshops, video conferences, and webinars. GSPH faculty and staff involvement in training and continuing education occurs through direct provision, administration, and support (such as evaluation). The school promotes its professional development activities through well-developed list-serves, websites, community-based organizations, and coalitions. While some of the trainings are limited to professionals with certain qualifications, such as MDs, many of the activities are open to any professional who would like to register.

The Institute of Developmental Disabilities offers a wide variety of activities for different targeted populations based on its sponsored projects aims. The following table presents data on workforce development presented as part of the IDD AY 2019-2020 Achievement Report (**Electronic Resource File F4.2.b**).

TABLE F4.2.b IDD Training Participants, AY 2019-2020	
Target Audience	Number of Participants
<u>Student Trainees:</u> Interdisciplinary students of the Developmental Disabilities/Early Intervention Graduate Certificate Program from the GSPH received interdisciplinary academic training in order to prepare them to provide services to the developmental disability population. These students were from various health-related disciplines, including, Social Work, Education, Clinical Psychology and Nutrition. Courses include introduction to public health, ecological model, and social determinants of health, human development and developmental disabilities.	10
<u>Medical School Students and Pediatric Residents:</u> Medical students and pediatrics residents are trained on best practices in health services for the population with developmental disabilities in all age groups and their families, on the following topics: telehealth, medical home model, social determinants of health, and family center model.	33
<u>Higher Education Faculty:</u> Higher education faculty of the GSPH, MSC and other UPR programs, where trained to increase knowledge and skills regarding state-of-the-art practices across the lifespan of individuals with developmental disabilities.	5
<u>Interdisciplinary Graduate Students:</u> Pre-service training is offered to graduate students of diverse disciplines, such as Social Work, Public Health, Education, Nutrition, Occupational Therapy and Language and Speech Pathology from the GSPH, MSC and other UPR Programs on best practices for interventions with children with developmental disabilities, and with their families. Training includes introduction to public health, ecological model, human development, social determinants of health and developmental disabilities.	9
<u>Continuing Education Activities:</u> Continuing education activities are offer to increase knowledge and skills of health care professionals and other professionals who work with people with disabilities. Health-related professionals from disciplines such as: Medicine, Nursing, Psychology, Pediatrics, Psychiatry, Social Work, Speech/ Language Therapy, and Occupational Therapy, and others. Topics offered include: best practices for interventions with children with developmental disabilities and their families, introduction to public health, ecological model, human development, social determinants of health and developmental disabilities, food security, developmental screening, medical home, family center model, long term care of people with disabilities, autism spectrum disorder, ADHD, dental care of people with disabilities, telehealth, and service coordination for people with disabilities, among others.	148
<u>Other University Students:</u> Training is offer to students of diverse disciplines, such as public health, Social Work, Education, Nutrition, Occupational Therapy and Language and Speech Pathology from the GSPH, MSC and other UPR Programs on best practices for interventions with children with developmental disabilities, and with their families. Training includes introduction to public health, ecological model, human	151

TABLE F4.2.b IDD Training Participants, AY 2019-2020	
Target Audience	Number of Participants
development, social determinants of health and developmental disabilities, public policy and other.	
<u>Social Work Service Coordinators:</u> An academic course on Service Coordination for persons with disability and their families is offer to Social Work undergraduate students of the Humacao UPR Campus.	37
<u>Personal and Child Care Providers:</u> Child Care- Head Start Providers and families received training related to developmental disabilities. Topics included the administration of ASQ-3 and MCHAT, Early Intervention, Transition and Developmental Screening, among others.	95
<u>Community Training Activities:</u> Community-training activities on developmental disabilities-related topics to health-related professionals, policy makers, lawyers, students, people with developmental disabilities and family members to increase knowledge and awareness on issues concerning populations with developmental disabilities, including availability of services, best practices, medical home, telehealth, family center model, and others.	1082
<u>Zika Workshops to Professionals and Families:</u> Training sessions concerning developmental disabilities (DD) topics on development outcomes, Zika and the early identification of DD conditions in children were offered to increase knowledge and awareness of health care professionals and families.	114
<u>Emergency Preparedness Training:</u> Training to increase knowledge and awareness on issues concerning emergency preparedness, technical assistance on the development of emergency preparedness plans and inclusive recovery efforts for people with developmental disabilities was offer to consumers, family members, professionals and paraprofessionals of agencies and community-based organizations.	186
<u>Long-term Care Training:</u> Training to increase knowledge and awareness on issues concerning long-term care including self-determination and self-advocacy for people with developmental disabilities was offer to health care related professionals (family doctors, pediatricians, social work, psychology and psychiatrist).	33

The Puerto Rico Geriatric Workforce Enhancement Program (PRGWEP) has developed and offered a variety of training opportunities. These include: 30hr Certification for the Development of Competencies in Older Adult Care of the IAGERO to direct care workers including home health aides and senior center personnel; Alzheimer’s Disease Identification, Diagnosis and Treatment training for health professionals; a COVID-19, older adults, and care facilities online training learning module; and other continuing education webinars, workshops, and online training activities. **TABLE F4.2.c** presents data of activities and participants from the most recent program report that covers the period of March 15 2020 to March 15 2021.

TABLE F4.2.c. PRGWEP Training Participants, March 2020 to March 2021	
Training Activity	Trainees from
Continuing Education Gerontology Activities for Professionals	1,055
30hr Certification for the Development of Competencies in Older Adult Care	149
Direct Care Worker Recertification	341
Older Adult and Family Caregiver Training	436
ADRD Continuing Education Activities for Professionals	832
ADRD Training for Direct Care Workers and Caregivers	695
ADRD Community Activities	394

As evidenced by the examples and information provided, the GSPH has a leading role in workforce development for health professionals across a wide spectrum of topical area offerings and training delivery mechanism. The school has formal training opportunities in the graduate and professional certificate programs as well as other shorter continuing education workshops and conferences. The school's diverse activities include in-person training, online synchronous activities, and online self-administered asynchronous options. This variety of topical alternatives and delivery mechanisms provide the school with a wide reach among health professionals with different interests and time constraints.

3) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The DECEP addresses capacity building needs of the public health workforce and also of those health professionals who do not have formal training in public health.
- The activities implemented through the DECEP evidence the school's involvement in addressing current and emerging public health issues.
- A strong network of collaborations with professional associations and service organizations allows the school to respond effectively to workforce development needs.

Weaknesses

- The impact of natural disasters and covid pandemic restrictions has limited professional development activities in some academic years.
- DECEP has a very important role in workforce development but has limited personnel.

Lessons Learned

- The GSPH should identify mechanisms to strengthen DECEP's personnel.

G1. DIVERSITY AND CULTURAL COMPETENCE

The school or program defines systematic, coherent and long-term efforts to incorporate elements of diversity. Diversity considerations relate to faculty, staff, students, curriculum, scholarship and community engagement efforts. The school or program also provides a learning environment that prepares students with broad competencies regarding diversity and cultural competence, recognizing that graduates may be employed anywhere in the world and will work with diverse populations.

Schools and programs advance diversity and cultural competency through a variety of practices, which may include the following:

- incorporation of diversity and cultural competency considerations in the curriculum
- recruitment and retention of diverse faculty, staff and students
- development and/or implementation of policies that support a climate of equity and inclusion, free of harassment and discrimination
- reflection of diversity and cultural competence in the types of scholarship and/or community engagement conducted

Aspects of diversity may include age, country of birth, disability, ethnicity, gender, gender identity, language, national origin, race, historical under-representation, refugee status, religion, culture, sexual orientation, health status, community affiliation and socioeconomic status. This list is not intended to be exhaustive. Cultural competence, in this criterion's context, refers to competencies for working with diverse individuals and communities in ways that are appropriate and responsive to relevant cultural factors. Requisite competencies include self-awareness, open-minded inquiry and assessment and the ability to recognize and adapt to cultural differences, especially as these differences may vary from the school or program's dominant culture. Reflecting on the public health context, recognizing that cultural differences affect all aspects of health and health systems, cultural competence refers to the competencies for recognizing and adapting to cultural differences and being conscious of these differences in the school or program's scholarship and/or community engagement.

- 1) List the school or program's self-defined, priority under-represented populations; explain why these groups are of particular interest and importance to the school or program; and describe the process used to define the priority population(s). These populations must include both faculty and students and may include staff, if appropriate. Populations may differ among these groups. (self-study document)**

The Graduate School of Public Health has adopted a definition of diversity and inclusion that considers all human differences and backgrounds such as; race, ethnicity, beliefs, sexual orientation, gender identity, functional diversity, age, migratory status, and others. Its mission is oriented towards ensuring an environment where diversity is not only accepted but welcomed as it ensures a stronger workforce and student body to promote health for All without exception. Diversity is understood by the school as a strength as it contributes to capacity building of future public health providers to ensure the best possible care for the diverse population of Puerto Rico.

The GSPH's vision of diversity stems from the Mission, Vision and Values that guide the GSPH Strategic Plan 2017-2022. As part of its mission the GSPH aims to contribute to the wellbeing of society with special emphasis on the Puerto Rican population. In order to fulfill this goal the school centers on a student profile that represents the diversity contained in the population. As part of its values the GSPH has declared the

following: 1) Respect toward the dignity, diversity and integrity of the human being; and 2) Solidarity and sensibility towards vulnerable populations. The mission and values guide the priority populations where diversity efforts are centered.

The GSPH recognizes that Puerto Rico's demographic profile and underrepresented populations are different from those of mainland United States and its Caribbean neighbors. According to the 2019 American Community Survey of the US Census, 92.9% of the residents of Puerto Rico reported having one race and 7.1% two or more races. In terms of ethnicity, 98.2% of the population of Puerto Rico self-describes as being of Hispanic ethnicity. Nevertheless, the statistics do not show that ethnicity and race are perceived differently in Puerto Rico in reference to the United States. Regarding race, 64.3% described themselves as white, 12.4% as African American, 0.1% as American Indian/Alaskan Native, and 15.9% as another race. In the student admission form students understand Hispanic as a race and they report it accordingly. Therefore, self-designation of race and ethnicity in Puerto Rico represents the individual's perception of his/her ancestry. The available data does not sustain a self-designation of race and ethnicity that may be comparable to the self-designation in the United States. For the purpose of monitoring and defining targets it used a single category of race and ethnicity. Moreover, the GSPH Faculty is philosophically opposed to the use of race categories designations since it tends to reinforce the myth of race as a biological category as opposed to a socially and politically constructed one. These observations (and the MSC's designation as a designated Minority Serving Institution by the US Department of Education) led the GSPH to reassess the conceptual definition and implementation of diversity and cultural competence activities to move beyond race and ethnicity. The socioeconomic areas that serve as the focus of diversity for the GSPH are low-income, gender and age. The school also focuses on vulnerable populations such as: people living with disability, people living with HIV, people with substance abuse problems, older adults, and the incarcerated population among others.

Puerto Rico's socioeconomic profile for 2019 reveals that 43.5% of the population is below the poverty level. This is more than twice the state of Mississippi (19.6%) which has the highest poverty rate of the 50 states in the United States. From the student recruitment and profile perspective, the UPR has been an important vehicle for economic opportunities and the creation of a middle class. Moreover, students from underserved and low-income communities provide an important voice and perspective for public health practice. For this reason attracting students from low-income backgrounds and first generation university students is an important focus for diversity in the school. From a service and research perspective the GSPH has a commitment with underserved communities and contributing to their wellbeing.

Gender serves as another key social area. The GSPH has always focused on gender equity from a broad perspective that moves beyond the outdated binary social definitions of male and female, and encompasses all gender identities. In Puerto Rico the struggle for gender equality has been at the forefront of the school, faculty and student's advocacy. The Puerto Rico government recently declared a state of emergency because of an increase in gender violence. This is indicative of the importance of gender equity initiatives and the diversity of voices needed from public health to which the GSPH is committed. From a student perspective, although the institution does not track these data the GSPH does through the efforts of the Office of the Associate Dean of Student Affairs. From a service and research perspective the GSPH has been active in research and advocacy for gender equality including the LBGTQ+ community.

The last social category the GSPH has as a focus is age. From a student profile perspective, graduate opportunities for studies in public health are provided for people who are about to enter the workforce (recent bachelor degree graduates) and to health professionals across the wide spectrum of career trajectories. This includes attracting students who are already well established in public health practice in

the workforce (hospital administrators, agency directors and coordinators, among others). This allows for the attainment of public health competencies to have an immediate impact in public health practice. The age and career stage diversity of students provides a rich learning environment where students with different backgrounds and experience interact and exchange diverse perspectives in addressing public health issues in both curricular and extracurricular activities. From a research and service perspective age is important in serving the older adult population. Puerto Rico has one of the oldest populations in the Americas, with 20.3% of its population being over the age of 65.

For faculty the University of Puerto Rico has an institutional policy of nondiscrimination that declares: “the obligation of not permitting discrimination against any employee or employment applicant, for reasons of race, color, religion, sexual orientation or gender identity and ethnic origin, in processes such as: selection, recruitment, compensation, fringe benefits, transfers, termination, severance, among others”. Faculty recruitment adheres to this institutional policy. Selection of faculty candidates is based on academic qualifications and experience, and the faculty position area of responsibility. However, in order to insure that GSPH faculty has representation of diverse perspectives the School tracks gender distribution of faculty, nationality of origin and diversity in terminal degree granting institutions.

Lastly the school’s research and service diversity focus centers on vulnerable populations with special emphasis on: people living with disability, people living with HIV, people with substance abuse problems, older adults, LGBTQ+ community, and the incarcerated population among others. This is part of the GSPH’s values. The GSPH has a long history of service and research projects in these areas. For example the MSC and GSPH have been at the forefront of HIV research and the Center for Evaluation and Sociomedical Research as well as individual faculty research and service endeavors have a long established record in these areas (see **Criteria E4**). Similarly the Institute of Developmental Disabilities has a 29 year history in serving the needs and enhancing the quality of life of individuals with intellectual and developmental disabilities and their families (see **Criteria E5**). Another example is that the Gerontology Program is the only graduate academic program that trains professionals in aging and older adult issues in Puerto Rico.

2) List the school or program’s specific goals for increasing the representation and supporting the persistence (if applicable) and ongoing success of the specific populations defined in documentation request 1. (self-study document)

The GSPH has three diversity related goals. These goals are centered on diversity in the student profile, and in service, research and community engagement activities.

Diversity Goal 1: Strengthen student recruitment to ensure it reflects the demographics of Puerto Rico with special emphasis on: first generation university students, students from low-income backgrounds, diverse gender and sexual orientations, and that represent different age groups.

Diversity Goal 2: To contribute to equity through research and service projects that promote diversity, equity and the needs of vulnerable populations.

Diversity Goal 3: To promote the wellbeing of the Puerto Rican population through faculty and student community impact initiatives with an emphasis on underserved communities and vulnerable populations. Diversity Goal 4: Ensure a diverse faculty body that represents a variety of perspectives, experiences, and academic and professional formation and practice.

- 3) List the actions and strategies identified to advance the goals defined in documentation request 2, and describe the process used to define the actions and strategies. The process may include collection and/or analysis of school- or program-specific data; convening stakeholder discussions and documenting their results; and other appropriate tools and strategies. (self-study document)**

Diversity Goal 1: Strengthen student recruitment to ensure it reflects the demographics of Puerto Rico with special emphasis on first generation university students, students from low-income backgrounds, diverse gender and sexual orientations, and that represent different age groups.

In order to insure the recruitment of a diverse student body the GSPH implements a variety of actions and strategies. In the recruitment process the Office of the Assistant Dean of Student Affairs recruits in a variety of settings which include service activities to underserved communities. This includes service activities by the GSPH Student Council which takes advantage of these opportunities to present the GSPH's academic programs to potential GSPH applicants. The GSPH Student Affairs Office takes advantage of every opportunity to provide orientations to high school students (to educate early about public health careers) and undergraduates in diverse institutions including those with low-income students. Applicant and newly-admitted student orientations are another important strategy in which students receive information on financial aid and the graduate assistantship program. During their studies in the GSPH, the Office of the Assistant Dean of Student Affairs has a prominent role in monitoring and taking action on students that may face difficulties during their studies, such as low-income students. The Office of the Assistant Dean of Student Affairs refers students with identified financial difficulties to available services and opportunities.. Among the initiatives conducted by the Office of Student Affairs has been referral of students to services and oppo. When wide needs are identified the Student Affairs has taken action, such as a year in which a community food cupboard so that students with economic difficulties had a no-cost option for lunch. Similarly, the Medical Sciences Campus cafeteria has a limited program with vouchers for lunch for students with the most need.

The GSPH has also enacted strategies to attract students from a variety of age groups and working professionals. The main strategy in this regard is the evening program offering that allows students with full-time employment to pursue graduate studies. Another concerted effort is integrating technology in the academic offering in innovative ways, such as hybrid courses. These actions provide flexibility for students that have to work full-time. These actions have been the result of discussions in the Administration and Academic Affairs Committee. The Professional Counseling Unit conducts a student needs assessment at the beginning of every academic year in which information on diversity variables of the student profile are collected. And the professional counselor of the GSPH is the mentor of the Queer Diversity Alliance student organization to help ensure an inclusive environment at the school. Lastly, in discussions of policy and changes in the Administration and Academic Affairs Committee and the program coordinators quarterly meeting, the impact of these policies or academic changes on students in the GSPH's diversity focus are taken into account. For example, during the covid pandemic transition to distance education, the impact of internet access by students in underserved areas was an important issue of discussion.

Diversity Goal 2: To contribute to equity through research and service projects that promote diversity, equity and the needs of vulnerable populations.

The GSPH tracks active service and research projects annually so that it can assess the school's actions in addressing diversity and vulnerable population needs in research and service activities. The GSPH has

service and research units and programs that are at the forefront of these efforts (See **Criteria E4 and E5**). Many of these projects have external advisory committees that help insure that they address the needs of the populations served. These projects also provide opportunities for students and faculty to participate in conferences, training and other opportunities that help incorporate these diverse perspectives in teaching and practice.

Diversity Goal 3: To promote the wellbeing of the Puerto Rican population through faculty and student community impact initiatives with an emphasis on underserved communities and vulnerable populations.

Each semester all faculty members report initiatives and activities of community engagement and impact. These activities include both curricular and extracurricular activities. This source of information allows for the identification of the communities served by these activities. This helps insure that the school is meeting its mission of serving the community with special emphasis on underserved communities and vulnerable populations. Moreover, the information collected registers activities with student participation which allows the school to ensure that student community engagement opportunities are being implemented.

Diversity Goal 4: Ensure a diverse faculty body that represents a variety of perspectives, experiences, and academic and professional training.

University of Puerto Rico policy requires an open recruitment search to ensure a free and fair process. Open positions are widely advertised in locally (Puerto Rico) and Internationally through various mechanisms including print media (newspapers), professional organization news and announcements (locally, nationally and internationally) and through other electronic means (such as e-mail listserv announcements). This ensures that open positions reach a diverse audience. The selection process goes through two processes of evaluation and recommendations within the school. The first step is the academic program's Department Personnel Committee and the second the GSPH Personnel Committee. This guarantees that a diverse group of faculty members have participated and provided input in the process. Lastly, once faculty members are recruited they have various avenues for presenting any issues they may encounter. The first is the faculty advocate of the Medical Sciences Campus which may intervene in any issues that may affect a faculty member. The second is the GSPH Faculty Affairs Committee which deals with any faculty issues from individual to collective issues.

4) List the actions and strategies identified that create and maintain a culturally competent environment and describe the process used to develop them. The description addresses curricular requirements; assurance that students are exposed to faculty, staff, preceptors, guest lecturers and community agencies reflective of the diversity in their communities; and faculty and student scholarship and/or community engagement activities. (self-study document)

The GSPH subscribes to the view that cultural competence is a continuous process that requires self-evaluation, cultural knowledge and skills, encounters with diverse populations, and a desire to participate in the process (Campinha-Bacote 2020). For this reason, the GSPH facilitates activities and opportunities in each of these areas throughout its instruction, research and service activities. In the curriculum, all students are introduced to diversity and cultural competence in their very first course (SALP 6006: Introduction to Public Health) and cultural competence knowledge and skills are reinforced throughout the curriculum. For example, for all MPH concentrations the SALP 6251: Leadership in Public Health course introduces students to skills that are important in engaging communities with different views and in managing conflicts. Similarly all DrPH concentrations have the ADSS 8105: Applied Public Health

Leadership Seminar course that reinforces these skills. All academic programs in the school have community engagement as part of both the integrative and practice experiences in the curriculum. The school also provides diverse extracurricular activities for engagement with different community contexts that expose students to diverse perspectives and communities. Examples of student opportunities for research and service activities are provided in **Criteria E4 and E5** with the graduate assistantship program serving as its main mechanism. Students also have opportunities to participate in professional development activities about underserved communities, vulnerable populations, diversity, disparity and equity. These activities in many instances involve members of communities themselves through talks, lectures, roundtables and other activities organized and promoted by the school (see **Criteria E3.1, F2, and F4**). These activities are organized as part of courses, coordinated by programs, departments or the school, or provided as part of the GSPH's research and service units. The GSPH Student Council and other student organizations also coordinate service activities which are for the most part directed towards underserved communities.

The GSPH has a variety of mechanisms that ensure a cultural competent environment. This includes cultural competence as an important component of curriculum design, support for research and service project activities, support and guidance for student organizations, and the identification of needs and strategies for action in the Administration and Academic Affairs Committee.

5) Provide quantitative and qualitative data that document the school or program's approaches, successes and/or challenges in increasing representation and supporting persistence and ongoing success of the priority population(s) defined in documentation request 1. (self-study document)

TABLE G1.5.a. Diversity Indicators among GSPH Student Population AY 2018-19 to 2020-21							
Indicator		2018-2019		2019-2020		2020-2021	
		Num.	Percent	Num.	Percent	Num.	Percent
Gender	Male	162	31.6%	138	29.4%	128	30.1%
	Female	350	68.3%	330	70.5%	297	69.8%
Age	20-29	318	62.1%	337	72%	275	64.7%
	30-39	114	22.2%	88	18.8%	83	19.5%
	40-49	56	10.9%	47	10%	40	9.4%
	50+	24	4.6%	25	5.3%	27	6.3%
Sexual Orientation*	Heterosexual	N/A		125	80.6%	82	86.2%
	Homosexual			10	6.3%	5	5.3%
	Bi-Sexual			9	5.6%	3	3.2%
	Pansexual			5	3.5%	1	1.1%
	Not Define preference			6	4.2%	4	4.3%
Income below \$20,000 annually		182	35.5%	161	34.4%	140	32.9%
First Generation in University		59	11.5%	60	12.8%	61	14.3%
*Data on Sexual Orientation of GSPH students comes from a "Needs Assessment Survey" conducted by the Professional Counseling Unit of the GSPH Office of Student Affairs. Participation rates in this survey for the AYs reported are as follows: AY 2019-20 – 32.7% and AY 2020-21 – 25.6%.							

TABLE G1.5.b. Diversity Indicators among GSPH Primary Instructional Faculty			
Indicator		Num.	Percent
Gender	Male	22	45.83%
	Female	26	54.16%
Nationality	Puerto Rico	43	89.58%
	Mexico	1	10.41%
	Colombia	1	
	Brazil	3	
Terminal Degree Granting University*	Puerto Rico	16	33.33%
	United States	25	58.33%
	Europe	4	8.33%

*Terminal Degrees of GSPH faculty members are from 29 different universities (Puerto Rico: 4, Europe: 4, and United States: 28).

TABLE G1.5.c. Distribution of GSPH Research and Service Projects with Diversity, Equity or Vulnerable Population Focus ¹ : AY 2017-18 to 2019-20		
AY 2017 - 18	AY 2018 - 19	AY 2019 – 20
25.7%	32.4%	37%

¹Includes Research and Service Projects in the following areas: 1) Vulnerable Populations (People living with HIV, Incarcerated population, Individuals who are homeless, people with substance abuse disorders, people living with a disability, LGBTQ, and older adults); and 2) Disparity and Cultural competence focus on service or research.

TABLE G1.5.d. GSPH Faculty and Student Community Impact Initiatives and Activities for Underserved Communities and Vulnerable Populations ¹ : AY 2017-18 to 2019-20					
AY 2017 - 18		AY 2018 - 19		AY 2019 – 20	
Num.	Percent ²	Num.	Percent	Num.	Percent
19	50%	11	35.4%	10	43.4%

¹Includes Research and Service Projects in the following areas: 1) Vulnerable Populations (People living with HIV, Incarcerated population, Individuals who are homeless, people with substance abuse disorders, people living with a disability, LGBTQ, and older adults); and 2) Underserved Communities from rural areas or low income urban areas.

²Refers to the percent of all reported community impact activities with a focus on underserved communities and/or vulnerable populations.

6) Provide student and faculty (and staff, if applicable) perceptions of the school or program's climate regarding diversity and cultural competence. (self-study document)

TABLE G1.6.a. GSPH Student Satisfaction with Diversity AY 2017-18 to 2019-2020					
Students who reported being "Very Satisfied" and "Satisfied" with "Respect towards diversity of the groups that form part of the University Community"					
2017-18		2018-19		2019-20	
%	n	%	n	%	n
79.5%	44	95.4%	44	81%	78

Source: Exit Interview Survey, University Environment Section

TABLE G1.6.a. GSPH Faculty Satisfaction with Diversity (2021)				
	Very Satisfied & Satisfied		Unsatisfied & Very Unsatisfied	
	%	n	%	n
Faculty satisfaction with:				
Respect towards diversity of the groups that form part of the University Community.	92.6%	50	7.5%	4
Diversity reflected in faculty composition.	79.6%	43	20.4%	11
Source: Diversity Survey Conducted Among Faculty				

7) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The GSPH implements varied research and service projects with diverse and vulnerable populations.
- The school's diversity is a strength as it contributes to capacity building of future public health providers to ensure the best possible care for the diverse population we serve.

Weakness

- Diversity data is not collected on other sectors of the school of campus community.

Lessons Learned

- The school should identify mechanisms for collecting diversity data from other school sectors like faculty and staff.
- GSPH should strengthen student recruitment efforts with a focus on diversity. This includes finding new spaces for promoting school programs to diverse populations and the possibility of designating staff to work directly with diversity and inclusion issues. In this process it is important to identify measures that facilitate the assessment of different recruitment strategies in contributing to student diversity.

H1. ACADEMIC ADVISING

The school or program provides an accessible and supportive academic advising system for students. Each student has access, from the time of enrollment, to advisors who are actively engaged and knowledgeable about the school or program's curricula and about specific courses and programs of study. Qualified faculty and/or staff serve as advisors in monitoring student progress and identifying and supporting those who may experience difficulty in progressing through courses or completing other degree requirements. Orientation, including written guidance, is provided to all entering students.

1) Describe the school or program's academic advising services. If services differ by degree and/or concentration, a description should be provided for each public health degree offering. (self-study document)

Academic advising is of great importance at the GSPH to sustain student retention and graduation rates, curricula effectiveness, and student overall satisfaction with their graduate experience. These processes entail a close collaboration from the Office of the Assistant Dean for Student Affairs and GSPH's academic programs to maintain coordinated efforts that preemptively and proactively resolve critical issues. Although academic advising has always been a continuing activity and effort in all academic programs, recently the school adopted an Academic Advising and Student Academic Progress Monitoring Policy (**Electronic Resource File A1.2.c.2**) to provide uniform guidelines across all academic programs. The policy also incorporates the competency assessment plan of the new curriculum to the advising process. The policy was developed to: 1) revise the GSPH's academic advisory system through an articulated structure and process that allow the school and academic programs to respond promptly to student issues and facilitate success; 2) establish an academic student follow-up process; 3) identify students who may be at-risk of academic delay and failure in a timely fashion; and 4) establish consistent protocols for the assessment of academic progress and probationary processes. Academic advising policy implementation and processes are overseen by the Associate Dean for Academic Affairs Office who is tasked with supervising the implementation and evaluation of academic advising policies as implemented by department chairpersons with the assistance of program coordinators. The Office of the Assistant Dean of Student Affairs provides overall support from a student point of view, collaborates with decision-making and student referral, and supervises the professional counselor's services related to academic advising. Program coordinators assist the Associate Dean in evaluating the advising policy and in providing recommendations for improvement in its implementation in quarterly meetings.

Newly admitted students are assigned an academic advisor by mid-September in their first year of study and receive a letter communicating their assigned advisor with contact information. Students are encouraged to contact their academic advisor at any time. Academic advisors assist students in planning their course work and course sequence, as well as to discuss academic and career issues. They also address areas such as time management, course workload and enrollment, and goal planning. Academic advisors may also refer students to relevant services provided by the GSPH (such as the professional counselor) or MSC. Program coordinators are also available to provide academic advising services to all students enrolled in their program and refer issues to the appropriate office or services as needed. Course instructors may discuss academic problems with faculty advisors or program coordinators. Students are encouraged to approach any faculty member with issues that concern them. If the faculty member deems it necessary, he/she can refer students to program coordinators.

As part of the academic advising process, at the end of each academic term (trimester), program coordinators review student grades and progress to identify risk indicators (students who have withdrawn from a course, failed a course, or obtained a “C” grade in a required course) and refer them to academic advisors. Upon review of an at-risk student’s academic performance, academic advisors may create a study plan and meet with students to discuss implications of the identified risk factors, determine challenges, and establish courses of actions. Study plans are reviewed with students and documented in the student’s academic record at the program level. Academic advisors inform program coordinators about advising recommendations and decisions, and submit study plans for approval of program coordinators.

Competency development assessment is also monitored and supported by academic advising processes. Students that fall behind in competency attainment, academic progress between courses, or with their thesis/dissertation processes, may be referred for academic advising. Also, department chairpersons and program coordinators have to discuss assessment report findings to determine possible courses of actions to address student competency issues, including referral to individual or collective academic advising sessions.

Academic programs that require a thesis or dissertation project for degree completion provide students with a manual that specify academic advising procedures and thesis or dissertation processes and requirements. Once a dissertation or thesis advisor is assigned to the student, he/she becomes the student’s academic advisor. The following information is included in the thesis or dissertation manuals: specific time-period within the curriculum to select research topic and academic advisors; process required to select a thesis/dissertation committee director (who will become the student’s academic advisor) and committee members; student, director and committee members responsibilities; clear guidelines on expectations and follow-up responsibilities of the thesis/dissertation committee director; documentation of related academic advising processes; and clear information about course and “in progress” grading requirements.

Advising also includes providing information on available resources and mechanisms to students with disabilities who may need reasonable modification. In accordance with this policy, the MSC provides support services to all students to promote their welfare, improve their quality of life, and support the attainment of their academic goals.

2) Explain how advisors are selected and oriented to their roles and responsibilities. (self-study document)

As stated in the Academic Advising and Student Academic Progress Monitoring Policy of the GSPH, academic advisors are designated by department chairpersons with the recommendation of program coordinators. Generally, advisors are chosen from within the primary-instructional faculty in the student’s program, considering his/her interests and faculty experience and expertise. Faculty that serve as academic advisors have ample knowledge of academic program curriculum and processes. Non-primary instructional and part-time faculty can also serve as academic advisors if they have ample knowledge and experience with the academic program as thesis supervisors or other similar roles. Department chairpersons are encouraged to select faculty that are creative and service-oriented, and who are also committed to the achievement of institutional goals. Academic advisors should also be knowledgeable about program curriculum and challenging courses that may impact students’ academic progression. They must also be willing to participate in academic advising training. Program coordinators provide academic advisors with resources such as program and dissertation manuals and handbooks to assist in the

orientation of their role as academic advisors. Academic advisors can, and are encouraged, to obtain relevant knowledge and skills for academic advising by participating in MSC workshops on student complaint procedures, reasonable modification, and Title IX trainings among others, offered yearly on campus. The Associate Dean of Academic Affairs' Office is in the process of developing orientation and training activities to support the new advising policy and provide academic advisors with a wider set of resources.

3) Provide a sample of advising materials and resources, such as student handbooks and plans of study, that provide additional guidance to students. (electronic resource file)

Student handbooks developed by programs for newly admitted students and supportive material prepared by the Office of Student Affairs Professional Counseling Unit/Licensed Professional Counselor are included in **Electronic Resource File H1.3**.

4) Provide data reflecting the level of student satisfaction with academic advising during each of the last three years. Include survey response rates, if applicable. Schools should present data only on public health degree offerings. (self-study document)

Data on student satisfaction with academic advising is collected in the exit interview survey. The instrument measures overall satisfaction with the academic experience, academic advising and mentoring, professional counseling, faculty, support services, and school environment. It is administered at the end of each academic year to GSPH graduating students.

The following table presents data on academic advising that is collected in the exit interview survey. It is important to point out that there was a change in how the data for academic advising was collected between the years reported. The data for AYs 2017-18 and 2018-19 was gathered as a yes or no question for each premise. After a careful review of CEPH criteria on academic advising the data was collected on a 4-point scale in student's perceived level of agreement with each premise related to academic advising. The response rates for the academic years presented in the table is as follows: 2017-18 - 29.5%; 2018-19 – 17.6%; 2019-20 – 38.8%.

TABLE H1.4.a. Student Satisfaction with Academic Advising, AY 2017-18 to 2019-20						
Academic Advising*	AY 2017-18 (n=49)		AY 2018-19 (n=51)		AY 2019-20 (n=78)	
	Yes (%)	No (%)	Yes (%)	No (%)	Completely agreed/ Agreed (%)	Completely disagreed/ Disagreed (%)
The academic advisor offered alternatives to solve enrollment and course availability issues.						
School	81.4	18.6	90.0	10.0	89.5	9.8
Public Health Degrees	82.0	18.0	91.0	9.0	89.0	11.0
The academic advisor offered timely information on their academic progress to address concerns regarding their degree completion.						
School	67.1	32.9	67.5	32.5	89.8	11.9
Public Health Degrees	74.0	26.0	79.0	21.0	92.0	8.0
The academic advisor was accessible and available to answer questions and address their concerns.						
School	86.4	13.6	85.0	15.0	92.4	10.1
Public Health Degrees	93.0	7.0	95.0	5.0	89.0	11.0
*Exit Interview Reports available in Electronic Resource File C2.5.						

Exit interview data on academic advising show that around 90% of students who completed the survey in the 2019-2020 academic year strongly agreed or agreed with the statement that the academic advisor was accessible, offered timely information on academic progress and concerns, and offered alternatives to solve enrollment and course availability issues. It is difficult to compare to the previous years since the data was not collected in the same manner. However, academic advisor accessibility and provision of alternatives has been relatively stable. The premise related to timely information on academic progress and concerns shows a positive increase in 2019-20 data as compared to the previous two years.

5) Describe the orientation processes. If these differ by degree and/or concentration, provide a brief overview of each. (self-study document)

The orientation process serves as the basis for academic advising. Before the beginning of a new academic year, newly admitted students receive an orientation, coordinated by the School's Office for Student Affairs, that involves a three-tiered process involving the campus, the school, and academic programs. A general orientation session is provided prior to registration in which campus and school officials participate. Some of the topics covered are MSC and GSPH norms and policies, financial aid, student health insurance, immunization requirements, tuition costs, registration process, and student services, among

others. GSPH student organizations such as the GSPH Student Council assist with, and participate in, the orientation to promote student involvement and engagement with decision-making processes. Access to the Student Manual and UPR-MSU institutional policies is given to students through a web-based platform (see **Electronic Resource File H1.3**). A second orientation activity takes place near or during registration week in which program coordinators offer a detailed explanation of the academic program in which the student has been admitted. This academic program orientation serves as the foundation for academic advising since students meet the program coordinator, review the curriculum of their study program, and receive information about academic requirements, expectations, and processes. Students also receive important written material and guidance on the curriculum, course sequence, course descriptions, and academic program objectives.

The Office of the Assistant Dean for Student Affairs also coordinates a series of workshops for all incoming students which is held prior to the beginning of graduate studies. The topics covered include graduate school survival skills and basic competencies needed to successfully complete a degree in public health. The goal of these workshops is to help students balance the demands of their program of study with their personal life. Other topics may include: an introduction to graduate school, how to select a research topic, time management, presentation skills, and the use of library databases. During the current accreditation cycle, the number of workshop sessions was increased to benefit more students (see **Criteria H2** for more details).

6) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- Academic advising is an ongoing activity at GSPH whose responsibility is distributed at the school and program level.
- The newly implemented policy for academic advising and academic progress follow-up establishes necessary guidelines to provide uniform guidelines and procedures across academic programs and ensure faculty members' commitment, support, and uniform actions with academic advising.
- Students show overall positive views of academic advising.

Weaknesses

- Student perception data come from a relatively small number of students responding to the exit interview. This low participation may lead to conclusions in this area that may not truly represent the entire body of students.

Lessons Learned

- To obtain student perception data from a larger number of students, the School needs to consider more effective strategies to increase participation and response rate in the exit interview. The school is currently implementing new strategies to increase participation rates.
- Although improved during the last year, student perception on receiving timely information on academic progress and concerns was relatively low. Therefore, the School should implement orientation and training activities to support the new advising policy and to provide program coordinators and academic advisors with a wider set of resources. Also, mechanisms need to be

implemented so newly appointed program coordinators have prompt access to the Student Information System and to the policies.

H2. CAREER ADVISING

The school or program provides accessible and supportive career advising services for students. Each student, including those who may be currently employed, has access to qualified faculty and/or staff who are actively engaged, knowledgeable about the workforce and sensitive to his or her professional development needs and can provide appropriate career placement advice. Career advising services may take a variety of forms, including but not limited to individualized consultations, resume workshops, mock interviews, career fairs, professional panels, networking events, employer presentations and online job databases. The school or program provides such resources for both currently enrolled students and alumni. The school or program may accomplish this through a variety of formal or informal mechanisms including connecting graduates with professional associations, making faculty and other alumni available for networking and advice, etc.

- 1) Describe the school or program's career advising and services. If services differ by degree and/or concentration, a brief description should be provided for each. Include an explanation of efforts to tailor services to meet students' specific needs. Schools should present data only on public health degree offerings. (self-study document)**

Over the last several years the GSPH has worked to create a more robust and integrated career-advising program. An integrated and holistic approach was implemented to meet the needs of active students and alumni, through the revision of a professional and career advising services and activities program, designed by a licensed professional counselor. The GSPH provides accessible and supportive career advising services for students and alumni. Each and every student and alumnus, including those who may be currently employed, have regular access to qualified faculty and/or staff who are actively engaged and knowledgeable about the workforce and sensitive to student professional development needs to provide appropriate career placement advice.

Career advisement at the GSPH is an ongoing process. Students are exposed to different working scenarios throughout their academic courses and practicum experiences, which assist them in choosing their career path. The practical skills component/experience of most academic programs is generally tailored to student's career development interests. This experience supports efforts to promote career track development and job placement. Practicum sites meet students' expressed needs in public health actual or potential work scenarios in Puerto Rico or elsewhere, capacity-building interests, career decision-making and direct requests for technical assistance. Some of these agencies eventually employ GSPH alumni.

The GSPH is widely recognized as a primary referral source among the public health workforces. Alumni also notify departments and the licensed professional counselor about job openings and speak to students at the request of faculty members as part of regular courses or as participants in seminars and professional meetings. Other agencies visit the school to hold orientation/recruitment sessions to promote internship opportunities and job openings. Students regularly receive communications and notices at their institutional e-mail addresses through sp_informa@rcm.upr.edu (an institutional communication network) and via direct communication from the licensed professional counselor, (consejeriasp.rcm@upr.edu). The information provided to active students and alumni includes job postings, professional conferences, scientific meetings, workshops, internships, training, and other professional development opportunities.

Students may seek advice or request support from faculty, program coordinators, or the licensed professional counselor (LPC) to receive advice in their pursuits of continuing doctoral studies, compete for internships or fellowships, and/or participate in special training programs as well as advice regarding entering directly into public health occupations. The Office of the Assistant Dean for Student Affairs works closely with programs in promoting students' knowledge and participation in these experiences. This communication and support continue as GSPH alumni transition into their careers.

The MSC Student Center for Counseling and Psychology (known as CECSi, acronym in Spanish) is a campus wide resource that coordinates job fairs and identify job placement opportunities and provide professional development and counseling services. Services from the CECsi include: vocational and career counseling, skills and preference assessment utilizing recognized occupational tests or inventories [Harrington O 'Shea, Cirino Vocational Interest Inventory, MBTI among others], professional resumé revision and advisement and general professional counseling and psychological services.

The GSPH licensed professional counselor (LPC) through the Professional Counseling Unit (PCU) offers holistically focused activities and individual counseling and advising services to both active students and alumni. The LPC, while being a licensed mental health counselor, among other specialties, also specializes in vocational counseling as part of a holistically focused approach to assist both students and alumni in pursuing their life and career goals. In addition, the LPC designs an annual student needs assessment survey to identify an active student's profile and identify needs and career and professional development activity preferences. Based on the results, the LPC designs, promotes, and provides or coordinates synergistically planned career and professional vocational development activities for both active students and alumni each year. An example of synergetic activities is providing an interview skills workshop, and then shortly after a mock-interview event. Activities have been offered both in person and online. During COVID pandemic in-person restrictions all workshops have been in-vivo-virtual or pre-recorded with virtual on-demand access. Many of these activities are promoted as part of "GSPH Career Month," where the Professional Counseling Unit promotes the importance of career skills, preparedness, and networking. Activities and workshops provided by the Professional Counseling Unit include activities on how to create a successful professional resume and CV, professional interview and job seeking skills, successful transitioning skills applicable to the professional arena, and the value of internships and how to apply successfully. These activities integrate human resources and public health professionals.

Career advising also occurs at the program level with program coordinators, academic advisors, and program faculty. Academic advisors and program faculty are available to students for career advising consultations and to help them define potential sources of employment and career advancement upon graduation. Academic programs receive job openings and requests for recommendations for qualified students and alumni from their professional public health practice networks. Faculty in these situations help connect students and alumni with prospective employers. Academic programs with internship experiences and extracurricular practice experiences also help connect students with prospective employers, expand professional networks, and expand marketable skills for the public health job market.

2) Explain how individuals providing career advising are selected and oriented to their roles and responsibilities. (self-study document)

At the GSPH, most structured career advising activities and services are mainly organized and provided by the licensed professional counselor (LPC) of the PCU. Professional counselors, due to the vast history of the profession, rooted in vocational and career counseling, are well prepared professionals qualified for this area. The GSPH's LPC specializes in vocational and career counseling as well as mental health counseling.

In the GSPH Academic Advising Policy part of role assigned to academic advisors is to “work with students in the development of sensible academic and professional plans”. Although the role of academic advisor is primarily oriented towards shepherding students through the successful navigation of their program of study and student learning, this process is focused on preparing students toward their projected career path, so academic advisors provide career advising as well. Program and practice coordinators fulfill are one of the main sources of career advising for students. They refer students to career opportunities in general. Program and practice coordinators have continuous contact with potential employers and public health practice sites. Practice experiences in the curriculum and the collaborative agreements with government agencies and community organizations on which they are based provide program coordinators with first-hand knowledge of employer needs. Based on these relationships employers contact program and practice coordinators for dissemination of employment opportunities as well as for alumni recommendations. Given these dynamics, program and practice coordinators are well positioned to provide career advising to students. Moreover, the GSPH faculty have wide professional networks with potential employers given their advisory, service and research roles with government agencies and private and community organizations. Program coordinators, academic advisors, and the faculty in general are expected to remain current in public health practice needs in the community that enhanced their ability to provide career counseling to students, they are also encouraged to participate in professional development opportunities that strengthen this role.

3) Provide three examples from the last three years of career advising services provided to students and one example of career advising provided to an alumnus/a. For each category, indicate the number of individuals participating. (self-study document)

The GSPH's Professional Counseling Unit does not limit professional and career activities and services to active students; both students and alumni are welcome. To encourage participation by both groups, all promotions for professional development, employment, internship, and volunteer opportunities, are shared with both active students and alumni (up to the last 5 years of graduates). Alumni are also reminded that comprehensive counseling services are available.

Individual Professional and Career Advising: The Professional Counseling Unit (PCU) of the GSPH offers individualized professional and career counseling and orientation to students who seek help to improve their skills and professional development. Students and alumni have the opportunity to receive individual vocational, professional and career counseling services. **TABLE H2.3.a** shows the number of individual counseling visits reported by the PCU for AY 2017-18 to 2019-20.

TABLE H2.3.a Professional Counseling Unit: Individual Career and Professional Counseling Visits		
AY 2017-18	AY 2018-19	AY 2019-20
68	99	78

Career Fair: The PCU organizes an annual career fair specifically catered to public health active students and alumni. Since 2015 the annual fair has been offered with the participation of public health related entities who offer employment, internship, or volunteer opportunities in public health. Due to the covid safety restrictions in 2020, and beginning of 2021, the career fairs were offered virtually. **TABLE H2.3.b.** shows the number of participants in career fairs for AY 2017-18 to 2019-20.

TABLE H2.3.b.Career Fair Participation		
AY 2017-18	AY 2018-19	AY 2019-20
91	82	Virtual due to covid restrictions, num. participants not available

Internship Talk: The PCU coordinates an annual internship talk provided by alumni who are participating or have previously participated in internships and/or fellowships programs. The licensed professional counselor serves as facilitator. This activity is designed, promoted, and provided to active students and recent alumni. The activity is usually offered in early December considering that many internship programs have deadlines in January. **TABLE H2.3.c.** provides internship talk participation data for AY 2017-18 to 2020-21.

TABLE H2.3.c. Career Advising: Internship Talks Participation			
AY 2017-18	AY 2018-19	AY 2019-20	AY 2020-21*
24	11	8	47
*Activity offered in an online virtual format due to covid restrictions			

Professional Development Workshops: The PCU has an annual plan of professional development skills activities. These activities have covered the following topics and skills:

- Resume and CV development
- Job seeking skills + tools + strategies (including networking and negotiations skills)
- Internship seeking skills + tools + strategies.
- Volunteer Opportunities seeking skills + tools + strategies.
- Job Interview skills (including mock interviews)
- Development of study skills, habits, and tools (in general but applicable to licensing board exams and professional arena)
- Successful Transitioning to professional career

4) Provide data reflecting the level of student satisfaction with career advising during each of the last three years. Include survey response rates, if applicable. Schools should present data only on public health degree offerings. (self-study document)

Data on student satisfaction with career advising is collected in the exit interview. The instrument measures overall student satisfaction with their academic experience, academic advising and mentoring, professional counseling, faculty, support services, and school environment. It is administered at the end of each academic year to GSPH graduating students.

The following tables present data on career advising and professional counseling collected in the exit interview survey. It is important to point out that there was a change in how the data for career and

professional advising was gathered between the years presented. Data for academic years 2017-18 and 2018-19 was collected as a yes or no question for each premise on career and professional advising. After a careful review of CEPH criteria on career advising the data was collected on a 4-point scale in student's perceived their level of agreement with each premise related to career advising. The response rates for the academic years presented in the table is as follows: 2017-18 - 29.5%; 2018-19 – 17.6%; 2020-21 – 38.8%.

TABLE H2.4.a. Student Satisfaction with Career Advising						
Career Advising*	AY 2017-18 (n=48)		AY 2018-29 (n=48)		AY 2019-20 (n=78)	
	Yes (%)	No (%)	Yes (%)	No (%)	Completely agreed/ Agreed (%)	Completely disagreed/ Disagreed (%)
The academic advisor provided relevant information related with my professional alternatives.						
School	57.1	42.9	61.0	39.0	78.4	14.8
Public Health Degrees	63.0	37.0	62.0	38.0	78.0	22.0
The academic advisor provided guidance related to employment sources.						
School	42.6	57.4	54.1	45.9	61.6	26.7
Public Health Degrees	58.0	42.0	55.0	45.0	68.0	32.0
The activities offered by professional counselor for students' development were useful for my improvement.						
School	84.5	15.5	95.0	5.0	98.9	1.1
Public Health Degrees	85.0	15.0	100.0	0.0	96.0	4.0
The professional counselor provided information related to employment opportunities in my professional area.*						
School					94.3	4.5
Public Health Degrees					96.0	4.0
*This premise was added to the Exit Survey on AY 2019-20 (Electronic Resource File C2.5).						

TABLE H2.4.b. Student Satisfaction with Professional Counseling						
Professional Counseling*	AY 2017-18 June 2018 (n=48)		AY 2018-19 June 2019 (n=48)		AY 2019-20 June 2020 (n=78)	
	Yes (%)	No (%)	Yes (%)	No (%)	Completely agreed/ Agreed (%)	Completely disagreed/ Disagreed (%)
Professional counselor was available to provide orientation related to processes that affect my life as a student.						
School	90.4	9.6	100.0	0.0	98.9	1.1
Public Health Degrees	88.0	12.0	100.0	0.0	100.0	0.0
Professional counselor was available to assist in addressing personal issues in a timely manner.						
School	89.0	11.0	100.0	0.0	98.9	1.1
Public Health Degrees	91.0	9.0	100.0	0.0	96.0	4.0
The professional counselor understood my concerns.						
School	84.7	15.3	100.0	0.0	97.6	1.2
Public Health Degrees	93.0	7.0	100.0	0.0	100.0	0.0
*Exit Interview Reports available in Electronic Resource File C2.5.						

Exit interview data on career advising and professional counseling evidence that survey respondents found the Professional Counseling Unit's activities and services useful and accessible (over 94% of those surveyed in all related premises). It is difficult to compare with previous years since the data was not collected in the same fashion. However, academic advisor's career advising is an area that requires reinforcement although it has showed improvement in each consecutive year reported.

5) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- Career advising is a shared responsibility conducted at the school and program level. Faculty actively share this responsibility with the GSPH Office for Student Affairs in the academic and career advising of students.

- Services at the Office for Student Affairs are readily available to students and perceived positively by students.
- The Professional Counseling Unit provides a wide range of professional development activities that students find useful.
- There is a continuous relationship with potential public health and related organizations, inside and outside of Puerto Rico to disseminate new job opportunities for active students and alumni at program level.

Weaknesses

- Student perception data come from a relatively small number of students responding to the exit interview. This low participation may lead to conclusions in this area that may not truly represent the entire body of students. The GSPH recently approved a policy that makes student's exit interviews part of the administrative requirements for student graduation. It is expected that incorporating the completion of the exit interviews as part of the administrative process that students undergo before graduating, will allow the school to reach close to 100% participation. The new policy will go into effect on academic year 2021-22.
- Student's views of career advising from academic advisors needs improvement.

Lessons Learned

- GSPH needs to develop strategies to strengthen the career advising skills of academic advisors. The new academic advising policy implemented in the school is a first step in this process.
- The exit survey's premise for obtaining information on career advising centers on the academic advisor and does not collect information on other sources of career advising such as program coordinators and faculty in general. The exit interview survey is being revised so data on career advising can be distinguished by source.
- To obtain student perception data from a larger number of students, the School needs to consider more effective strategies to increase participation and response rate in the exit interview. The school is currently implementing new strategies to increase participation rates.

H3. STUDENT COMPLAINT PROCEDURES

The school or program enforces a set of policies and procedures that govern formal student complaints/grievances. Such procedures are clearly articulated and communicated to students. Depending on the nature and level of each complaint, students are encouraged to voice their concerns to school or program officials or other appropriate personnel. Designated administrators are charged with reviewing and resolving formal complaints. All complaints are processed through appropriate channels.

- 1) Describe the procedures by which students may communicate any formal complaints and/or grievances to school or program officials, and about how these procedures are publicized. (self-study document)**

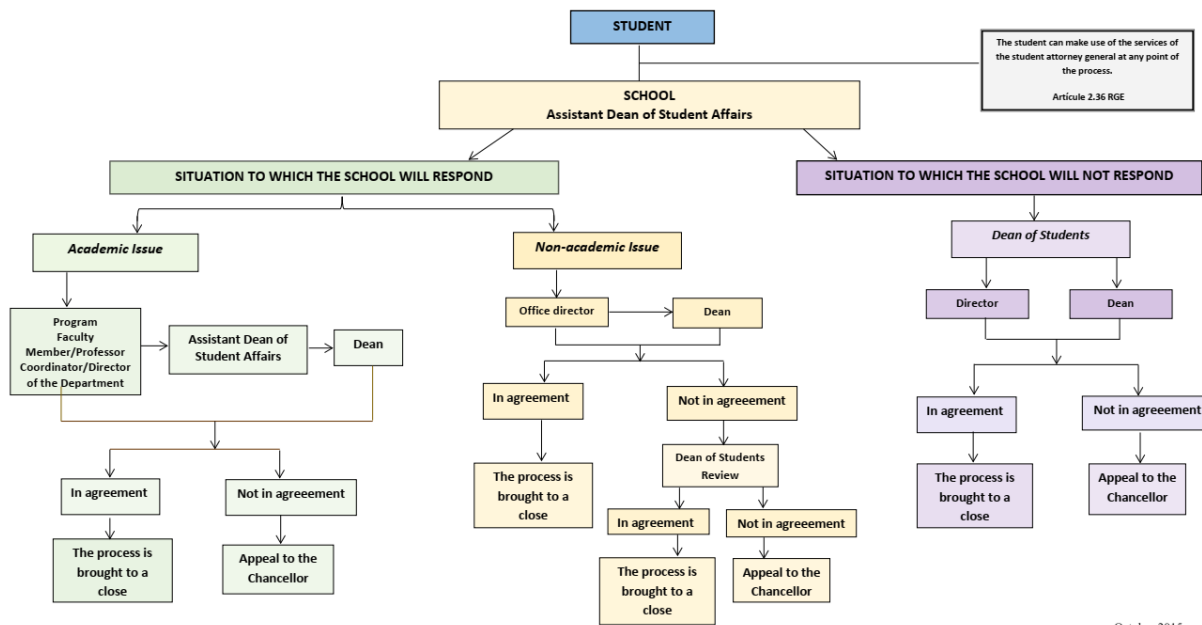
Students experiencing academic difficulty are referred to program coordinators and to professional counseling services at the Office of the Assistant Dean for Student Affairs. Students may communicate their concerns to the program coordinator, who will refer them to the licensed professional counselor, or to the Assistant Dean for Students Affairs. Issues are addressed according to procedures stated in the UPR Student Bylaws and the Medical Sciences Campus Student Bylaws. When necessary, program coordinators will refer the concern to the appropriate authorities, such as department chairpersons or the MSC Academic or Student Affairs Deans.

At the campus level, the Office of the Student Ombudsperson offers intercession, mediation, negotiation, and conciliation services and makes referrals to arbitration services, if needed. The ombudsperson assists students in grievance procedures and advocates for students' rights in all areas of campus life. This office is committed to helping the MSC academic community in solving situations that may affect the quality of students' experiences in the academic, administrative and support services areas. Most cases brought to the attention of the ombudsperson are related to academic grievances and problems with faculty.

The grievances procedures are stated in the Deanship for Student Affairs web page, GSPH documents related to academic policies and procedures, and the Student Handbook, which are distributed during the orientation process.

- 2) Briefly summarize the steps for how a complaint or grievance filed through official university processes progresses. Include information on all levels of review/appeal. (self-study document)**

Process for Dealing with Student Complaints and Grievances



Members of the campus community may file complaints at their school or unit level and appeal to higher university authorities (department chairpersons, Deans, Chancellors, President, University Board, and Board of Trustees). The university disciplinary actions procedure is mandated by Article 35 of the UPR General Bylaws which clearly states that the corresponding authority must act and follow procedures in grievance cases. Certification No. 138 (1981-1982) of the former Council on Higher Education, established the UPR Administrative Appeals Procedure, specifying the levels of authority and timeframe that should be observed in cases of appeal. Board of Trustees Certification 41 (2002-2003) states that the institution must notify employees and students regarding their right to appeal.

Certification 147, 2015-16 of the MSC Administrative Board, outlines the procedure for the handling of student complaints and grievances. Academic complaints are channeled through the Assistant Dean of Student Affairs' Office which on academic complaints guides the student through various ascending levels of appeal to address issues and complaints. The first level in attempting to resolve student complaints is the program and department level that includes faculty involved in the issue, program coordinator and department chairperson. If the student is not satisfied with the mediation and/or determination at the department level the issue is raised to the Associate Dean of Academic Affairs. The Associate Dean reviews the issue and meets with relevant parties to reach a determination. If the student is not satisfied by this determination the issue is raised to the Dean of the school. If the student is still not satisfied the issue is elevated to the Dean of Students of the MSC and finally the Office of the Chancellor.

For non-academic complaints, the student must present his/her complaint to the office director relevant to the issue raised in the complaint. The dean of the corresponding office serves as the first level of appeal if the issue is not resolved or the student is not satisfied by the resolution. If the issue is still not resolved or the student is not satisfied the student may raise the complaint to the MSC Dean of Students and subsequently to the Chancellor.

The student may choose to bring a complaint directly to other institutional officials, such as the Dean of Students of the MSC or Student Ombudsperson. According to Certification 119 2014-2015, UPR Board of Trustees - UPR Student Ombudsperson Policy, informal and independent mechanisms for conflict resolution are provided. The principle is that through dialogue and communication, situations can be resolved. If the situation is not resolved, the student can bring it to the appropriate forum. The Student Ombudsperson (UPR Bylaws, Art. 2.36) provides an outside mechanism that provides orientations and help students navigate complaint procedures through the various levels of appeal. The Office of the Student Ombudsperson offers intercession, mediation, negotiation, and conciliation services and makes referrals to arbitration services, if needed. The ombudsperson assists students in grievance procedures and advocates for students' rights in all areas of campus life. This office is committed to help the MSC academic community in solving situations that may affect the quality of students' experiences in the academic, administrative and support services areas. Most cases brought to the attention of the ombudsperson are related to academic grievances and problems with faculty.

The grievances procedures are stated in the Deanship for Student Affairs web page, GSPH documents related to academic policies and procedures, and the Student Handbook, which are distributed during the orientation process. Grievance procedures are also explained in the newly admitted student orientations.

Another forum to submit a grievance procedure for sexual discrimination is available through Title IX regulations. The Title IX office's responsibility is to initiate the informal investigation process upon receiving a complaint. Also, to establish the processes for submitting, investigating, and adjudicating complaints for alleged acts of sexual harassment and/or retaliation carried out by members of the university or visitors against students, employees, contractors, or people who come to the University of Puerto Rico to receive services or information. The grievance procedure is published at the web page of the MSC, posters across the campus and sent by emails upon request. Also, the grievance procedure is discussed in yearly Title IX orientation and education activities to the MSC community. The Title IX Office uses Certification 130 and Certification 140 as reference for the investigation process regarding situations of sexual misconduct and other manifestations of sex discrimination. As part of the institutional procedure to submit a complaint, a disclaimer about the intentional presentation of a false report to harm another person is considered dishonest behavior and is a violation of the policies of the university. A member of the academic community that presents a false report can be submitted to disciplinary actions and sanctions that can include the termination of the employee or, in the case of a student, expulsion from the University as according to General Regulations of the University of Puerto Rico, Article 35, Section 35.2.16, 16 of February of 2002, following the amendment since the 10 of December of 2006 and the General Regulations of Students of the University of Puerto Rico. The process for submitting a complaint varies according to the status of the person in the campus. The students can submit a sex discrimination complaint through the Office of Student Ombudsperson, the Dean of Students, professors, or faculty of the school. Complaints are reported in an annual report by Title IX's office.

3) List any formal complaints and/or student grievances submitted in the last three years. Briefly describe the general nature or content of each complaint and the status or progress toward resolution. (self-study document)

Academic Year 2018-19

1. Group of students (18) presented a formal complaint related to evaluation results and feedback in relation with the final date to withdraw from a course. The issue was addressed and resolve by the Dean of Students affairs of the GSPH and the Ombudsperson.

2. Group of students (17) presented a formal complaint about the delay of faculty to present results of evaluations and course progress and feedback in relation with the final date to withdraw from the course. The issue was addressed and resolved by the Dean of Student Affairs of the GSPH and the Ombudsperson.
3. Also, a few students presented grievances related to misunderstandings in the evaluation process, requirements in the syllabus and administrative process.

Academic Year 2019-20

1. Group of students (25) presented a formal complaint related to the evaluation results and feedback in relation with the final date to withdraw from the course. The issue was addressed and resolved by the Dean of Students Affairs of the GSPH and the Ombudsperson.
2. Also, a few students present grievances related to misunderstandings in the evaluation process, requirements in the syllabus and administrative process.

Academic Year 2020-21

1. Group of students (6) present a formal complaint related to the changes and methodology applied in a course for dealing with the pandemic emergency. The issue was addressed and resolved by the Assistant Dean of Students Affairs of the GSPH and the Ombudsperson.
2. Also, a few students present grievances related to misunderstandings in the evaluation process, requirements in the syllabus and administrative process.

4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)

Strengths

- The UPR and MSC has clearly defined grievance and complaint procedures.
- Students have access to the student ombudsperson as an advocate to accompany them during the grievance and complaint process.

Weaknesses

- There are recurrent complaints regarding specific issues that need to be addressed.

Lessons Learned

- Identify these issues, and strategies to ensure that these are addressed more effectively. (For example design and implement more comprehensive trainings for faculty in general).

H4. STUDENT RECRUITMENT AND ADMISSIONS

The school or program implements student recruitment and admissions policies and procedures designed to locate and select qualified individuals capable of taking advantage of the school or program's various learning activities, which will enable each of them to develop competence for a career in public health.

- 1) Describe the school or program's recruitment activities. If these differ by degree (eg, bachelor's vs. graduate degrees), a description should be provided for each. Schools should discuss only public health degree offerings. (self-study document)**

The GSPH reaches potential candidates interested in pursuing careers in public health and other related fields through its web page (<http://sp.rcm.upr.edu>), promotional leaflets, Facebook page, the school catalog, and other materials distributed in recruitment activities, career fairs, and professional meetings and events. The School also advertises in local newspapers and social media.

The Office of the Assistant Dean for Student Affairs is responsible for most recruitment activities and coordinates efforts with academic program coordinators. Recruitment efforts are supported by a faculty member of the Master's in Health Education Program specialized in Health Communication. Recruitment activities and initiatives include visiting college campuses throughout Puerto Rico, participating in professional events, and collaborating with public health, health care and professional organizations. The DrPH program is also promoted through special orientation sessions, networking efforts with professional associations and one-to-one direct contact with potential students through email messages. The GSPH's Continuing Education Division collaborates with these recruitment efforts by distributing materials and information about the GSPH in continuing education activities. The GSPH Student Council and other program and department student organizations participate in recruitment activities. In addition, faculty and alumni participate in recruitment activities.

- 2) Provide a statement of admissions policies and procedures. If these differ by degree (eg, bachelor's vs. graduate degrees), a description should be provided for each. Schools should discuss only public health degree offerings. (self-study document)**

Admissions procedures involve both the MSC Admissions Office and the GSPH. Applications with the required documents are reviewed and verified in terms of completeness by the campus Admissions Office, which then sends the information of each applicant in a digital format to the corresponding academic program and to the GSPH Assistant Dean for Student Affairs. The information provided consists of a copy of the application and the required documentation as applicable to the specific academic program. Once the program admissions committee (composed of program faculty) has evaluated the documents provided with the applications, applicants are invited for the required interview. After all applicants have been interviewed and their admission scores are calculated, program faculty make recommendations regarding admission.

Once the evaluation process is completed each academic program submits a report listing the applicants in descending order and divided into the following categories: (a) admitted applicants; (b) applicants in waiting list; and (c) declined applicants. The Office of the Assistant Dean for Student Affairs verifies applications to assure adherence to the school's admissions policy and non-discrimination regulations. Once verified, the final report is sent to the MSC Admissions Office, which has the responsibility of sending the acceptance or rejection letters to applicants.

Candidates are admitted on a competitive basis. Therefore, applicants must present evidence of successful completion of all admission requirements for the program for which they apply. The School's admission policy, norms, and procedures (see **Electronic Resource File H4.2**) clearly state that programs should admit students that demonstrate the intellectual potential and capacity for graduate and scientific studies which is done through the admission evaluation and selection process.

During AY 2020-2021 the school revised its admission requirements for all academic offerings which will be implemented for applicants in academic year 2021-2022. The revision was precipitated by the Educational Testing Services' (ETS) decision to discontinue the *EXADEP™* test (Graduate Studies Admission Test - *Examen de Admisión a Estudios de Posgrado*) and close its Puerto Rico office. Although the GSPH's previous admission policy accepted the GRE test, the EXADEP test was administered in Spanish and was more closely aligned with the student profile in Puerto Rico. The GRE was determined to place our candidates at a disadvantage because of language barriers and other reasons. An Ad Hoc committee reviewed literature on the GRE test and graduate school tendencies regarding the elimination of standardized tests as part of admission criteria. Based on the Ad Hoc Committee report a new admission policy with new requirements was developed, discussed, and approved by the Administration and Academic Affairs Committee and subsequently by the GSPH faculty. The new policy and procedures also include a detailed justification and operational definition for the new selected criteria.

Admission Policies, Procedures, and Requirements for the DrPH Program

DrPH Program general admission requirements: General requirements for admission to the DrPH Program remain the same as those approved and applied since 2014-2015 except for the elimination of the graduate admission test. These requirements are:

- A Master's degree in a discipline offered by a school of public health recognized by the international academic community. Applicants who hold a Master's degree in other disciplines must have completed a graduate course in Biostatistics or Statistics, Inferential Statistics, Epidemiology, and an Introductory Course in Public Health. It is highly recommended that they have knowledge and skills in information literacy/systems and their applications.
- It is highly recommended that applicants be fluent in Spanish and have adequate/proper comprehension of the English language.
- Grade point average of 3.00 (on a scale of 4.00) at the master's level or its equivalent. Applicants should have a composite admission score of 75% or more, as calculated by the GSPH admission formula.
- Teaching, research or service experience in the field of public health.

- All DrPH specialties require students to approve a statistical inference course at the graduate level prior to admission to the doctoral program.
- Once students are enrolled in the doctoral program, no waivers will be granted regarding the requirement of core courses or specialty courses that pertain to the DrPH curricular sequence. This norm will be applicable to all DrPH specialties.
- Interview with the Doctoral Program Admissions Committee.

Specific Requirements for Admission to the DrPH Program by Specialty Area:

DrPH in Environmental Health:

- Submit an application form, including the following documents: Official transcript of graduate studies and *Curriculum Vitae*; Evidence of professional experience for the past five (5) years of employment issued by the Human Resources Department of the employer and the immediate supervisor; Three (3) letters of recommendation (One of the three letters must be from a professor in the applicant's master's program who is able to comment on the applicant's qualifications to undertake doctoral studies).
- A written essay, on the day of the interview, using a word processor. The format for this written component of the evaluation may vary.
- Applicants must have approved at least a graduate level introductory course in Environmental Health with at least a grade of "B".
- Computer literacy in MS Word, MS Excel, MS Power Point, and at least one statistical software package such as SPSS, STATA, EPI-INFO, SYSTAT or SAS is highly recommended.

DrPH in Social Determinants of Health

- Submit an application form, including the following documents:
 - Up-to-date curriculum vitae.
 - Three (3) letters of recommendation, including one from the student's master's thesis advisor. If the thesis advisor is not available, applicants must provide contact information for two additional names from professors who may be contacted and are able to comment on their qualifications for graduate study.
 - A written essay between 5 to 7 pages describing the applicant's interest in social determinants of health; experience with advocacy, research, teaching and service in public health promotion and protection; and the special project to be developed if admitted to the specialty.
- Candidates will be required during the interview to read and present a professional article or to write an essay, as part of the admission process.

DrPH in Health Systems Analysis and Management

- Submit a written essay, on the day of the interview, using a word processor.
 - Completed the following courses prior to admission to the DrPH with at least a grade of "B":
 - pre-calculus or equivalent at the undergraduate level
 - Finance course,
 - An economics course at the graduate level.

- Computer literacy in MS Word, MS Excel, MS Power Point, and at least one statistical software package such as SPSS, STATA, EPI-INFO, SYSTAT.

TABLE H4.2.a. GSPH Admission Criteria for DrPH Programs	
Grade Point Average	40%
Essay	25%
Interview	20%
Analysis of Academic Record (5% Transcript review; 5% Work experience; 5% Evaluation of quantitative skills)	15%
Total	100%

The admission score is calculated based on the above criteria. Applicants are ranked according to their admission score. Program slots are filled until all spaces have been assigned. The school's minimum admission score is 75% for the doctoral level. Nevertheless, academic programs can establish higher minimum admission scores.

Admission Policies, Procedures, and Requirements for the Master programs

Master Programs general admission requirements: Applicants to master's programs must comply with the general requirements listed below:

- Bachelor's degree or its equivalent from a college or university of recognized standing, with a minimum grade point average of 2.85 (on a scale of 4.00)
- Fluency in Spanish and reading knowledge and comprehension of the English language are required.
- Attend an interview.
- Meet the specific requirements of the selected program. Pre-requisite courses for each program are listed in the GSPH Policy and Procedures for Admission 2020-2021.
- Submit an application form, including the following documents:
 - An official copy of all academic transcripts (including undergraduate and graduate courses) from previous higher education institutions to be sent directly to the Admissions Office.
 - An essay in the format established by the selected academic program.
 - Two letters of recommendation showing the academic and professional performance of the candidate (his/her work experience and/or participation in research and/or service projects).
 - A Resume or CV that helps demonstrate and evaluate his/her work experience along with the letters of recommendation.

TABLE H4.2.b. GSPH Admission Criteria for Master Programs	
Grade Point Average	40%
Interview	25%
Essay	20%
Analysis of Academic Record (5% Transcript review; 5% Work experience; 5% Evaluation of quantitative skills)	15%
Total	100%

The admission score for the Master Programs is calculated based the criteria in **TABLE H4.2.b**. Applicants are ranked according to their admission score. Program slots are filled until all spaces have been assigned. The school’s minimum admission score is 70% for the Master’s level. Nevertheless, academic programs can establish higher admission scores.

- 3) Select at least one of the following measures that is meaningful to the school or program and demonstrates its success in enrolling a qualified student body. Provide a target and data from the last three years in the format of Template H4-1. In addition to at least one from the list that follows, the school or program may add measures that are significant to its own mission and context.**

TABLE H4.3.a. GSPH Outcome Measures for Recruitment and Admissions, AY 2018-19 to 2020-21				
Outcome Measure	Target	(AY 2018-2019)	(AY 2019-2020)	(AY 2020-2021)
Average GPA of newly admitted DrPH students	3.6 and above	3.62	3.81	3.72
Average GPA of newly admitted MPH students	3.4 and above	3.35	3.39	3.47

- 4) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area. (self-study document)**

Strengths

- The GSPH has well-defined and recently reviewed policies and procedures for student recruitment and admissions.
- The GSPH uses multiple methods and communication venues to disseminate information on academic offerings.

Weaknesses

- The GSPH has not maximized the potential use of social media and platforms to increase its visibility and recruitment outreach efforts.

Lessons Learned

- Social media and other dissemination strategies should be used more actively for recruitment purposes.
- Identify and assign a specialized manager to strengthen and maintain student recruitment and school visibility using social media strategies

H5. PUBLICATION OF EDUCATIONAL OFFERINGS

Catalogs and bulletins used by the school or program to describe its educational offerings must be publicly available and must accurately describe its academic calendar, admissions policies, grading policies, academic integrity standards and degree completion requirements. Advertising, promotional materials, recruitment literature and other supporting material, in whatever medium it is presented, must contain accurate information.

- 1) Provide direct links to information and descriptions of all degree programs and concentrations in the unit of accreditation. The information must describe all of the following: academic calendar, admissions policies, grading policies, academic integrity standards and degree completion requirements. (self-study document)**

The main webpages available to students is the Medical Sciences Campus page (<https://rcm2.rcm.upr.edu/>) and the Graduate School of Public Health webpage (<https://sp.rcm.upr.edu/>). Both pages provide links to all relevant and updated information.

The Academic Calendar is prepared by the MSC Registrar's Office and sent to students' institutional email on an annual basis by the MSC Deanship of Academic Affairs. It can also be accessed by potential applicants and students at the GSPH website on the drop-down menu of the Academia section: <https://rcm2.rcm.upr.edu/wp-content/uploads/2020/10/Calendario-Academico-RCM-2020-21.pdf>

The Medical Sciences Catalogue is the official document containing up to date admission and degree completion requirement for all academic programs in the MSC. It contains a section for the GSPH with information on all academic programs. It is available in the following link: [UPR-MSC-CATALOG-2021-2024-Rev-March_10_2021.pdf](#).

Links to the school's program admission criteria and requirements and academic program information can be accessed through the GSPH webpage. The following links direct to the specific information:

Admission Policies, Norms and Procedures	https://sp.rcm.upr.edu/wp-content/uploads/sites/18/2020/12/Normas-Admisio%CC%81n-EGSP-2020-2021-aprobadas-por-el-SA-5-nov.-2020.pdf
General Admission Requirements	https://sp.rcm.upr.edu/asuntos-estudiantiles/admisiones/requisitos-generales-de-admision/
Admission Application Process	https://sp.rcm.upr.edu/asuntos-estudiantiles/admisiones/proceso-de-solicitud-a-la-escuela/
Grading policies applicable for GSPH students	https://daa.rcm.upr.edu/wp-content/uploads/sites/12/2020/03/manual_registrador_2010-11.pdf Appendix 15 of the above-mentioned Manual (page A-73) includes MSC Academic Senate Certification, Number 17(a), 1977-1978 applicable to the GSPH

Revision and appellation processes for final course grading at Medical Sciences Campus	https://de.rcm.upr.edu/wp-content/uploads/sites/13/2020/06/Cert-042-2019-2020-SA.pdf
MSC Academic Integrity Statement for syllabi and academic documents	MSC Academic Senate Certification 049, 2016-2017 (see Resource File)
Academic Integrity in the UPR	<p>The MSC Student Manual (2019-2020) (p. 100) cites Article 6.2 of the UPR General Bylaws for Students regarding Student Behavior Codes subjected to disciplinary sanctions, which include Academic dishonesty.</p> <p>https://de.rcm.upr.edu/wp-content/uploads/sites/13/2020/03/MANUAL-DEL-ESTUDIANTE-2019-2020.pdf</p>