

**MARYLAND HIGHER EDUCATION COMMISSION
ACADEMIC PROGRAM PROPOSAL**

PROPOSAL FOR:

- NEW INSTRUCTIONAL PROGRAM
- SUBSTANTIAL EXPANSION/MAJOR MODIFICATION
- COOPERATIVE DEGREE PROGRAM
- WITHIN EXISTING RESOURCES or REQUIRING NEW RESOURCES

(For each proposed program, attach a separate cover page. For example, two cover pages would accompany a proposal for a degree program and a certificate program.)

Johns Hopkins University

Institution Submitting Proposal

Spring 2017

Projected Implementation Date

Post-Baccalaureate Certificate

Health Finance and Management

Award to be Offered

Title of Proposed Program

1214-30

Suggested HEGIS Code

51.0701

Suggested CIP Code

Bloomberg School of Public Health

Department of Proposed Program

Michael Klag, Dean

Name of Department Head

Philip Tang


Contact Name

alo@jhu.edu

Contact E-Mail Address

(410) 516-6430

Contact Phone Number



Signature and Date

9/19/2016

President/Chief Executive Approval

N/A

Date

Date Endorsed/Approved by Governing Board

**The Johns Hopkins University
Bloomberg School of Public Health
Proposal for Substantial Modification to an Existing Certificate Program
Post-Baccalaureate Certificate in Health Finance and Management**

A. Centrality to institutional mission statement and planning priorities

1. Program description and alignment with mission

The Johns Hopkins University Bloomberg School of Public Health (JHSPH) is pleased to submit a proposal to substantially modify its existing and previously endorsed Post-Baccalaureate Certificate in Health Finance and Management (HEGIS code 1214-30, CIP code 51.0701) to offer an online option. The Post-Baccalaureate Certificate in Health Finance and Management has been offered through the Department of Health Policy and Management since 2012.

Through its three core activities—education, research, and the application of new knowledge—JHSPH is dedicated to the improvement of the public’s health and the prevention of diseases and disability. The PBC in Health Finance and Management provides an opportunity for education and research in this area for full-time students and early to mid-career professional seeking credit for educational advancement and professional development, as well as physicians or other clinical staff transitioning into administrative roles and seeking to gain appropriate credentials.

JHSPH is focused on expanding its health finance and management courses as they address a fundamental competency within the department. The online certificate program is designed to foster financial and leadership competencies using existing online content within the department and related departments within the School.

The mission of the Johns Hopkins University is to educate its students and cultivate their capacity for life-long learning, to foster independent and original research, and to bring the benefits of discovery to the world. This program is fully consistent with Johns Hopkins’ mission. The online certificate program offers the same rigorous educational experience available to other graduate students at the Bloomberg School, as it is based entirely upon the same material and is taught by the same instructors as the existing classroom or online programs. At the same time, it meets the needs of professionals who work full-time and seek a flexible yet comprehensive program independent of geography, work environment, and schedule.

The modified certificate program will require successful completion of a minimum of 18 credits. Students may complete the program over a minimum of three 8-week terms or up to a maximum of 3 years, either as a part of their degree programs at JHSPH, or as a unique credential.

2. Alignment with institutional strategic goals

Johns Hopkins University strategic goals

The proposed program advances Johns Hopkins University's *Ten by Twenty* vision and strategic goals in a number of significant ways. The program will support the core academic mission of the University by strengthening interdisciplinary collaboration in teaching and training. Additionally, the program will enhance the impact of the Bloomberg School of Public Health, and thus the University, by providing access to students across the globe.

Johns Hopkins Bloomberg School of Public Health strategic goals

The mission of The Johns Hopkins University is to educate its students and cultivate their capacity for life-long learning, to foster independent and original research, and to bring the benefits of discovery to the world. The mission of the Johns Hopkins Bloomberg School of Public Health is to improve health "through discovery, dissemination, and translation of knowledge and the education of a diverse global community of research scientists and public health professionals."

One of the seven strategic priorities of JHSPH is to prepare leaders in public health science and practice to address current and future public health challenges. One of the near-term goals within that priority is to develop a comprehensive suite of contemporary certificate and degree offerings, for full- and part-time students, with flexible formats that respond to public health needs in both the domestic and international markets. It is clear that an online program offers a flexible format and enables this program to more easily reach international markets.

In recent years, JHSPH has moved steadily into the field of online education, offering more courses online that enable the delivery of such certificates in an online format. This development meets two needs: (1) it contributes to the convenience and flexibility of existing offerings, by allowing students to take a mix of classroom and online courses, and (2) it opens this educational opportunity to a much larger market, enabling students throughout the country and, indeed, the world to take courses at JHU.

The goal of this initiative is to promote and enhance the quality of education in health finance and management both nationwide and internationally through the utilization of advanced online educational technologies. The proposed modification will continue to build and draw upon the strengths of existing resources and the expert faculty within the JHSPH.

B. Adequacy of curriculum design and delivery to related learning outcomes

1. Program Outline and Requirements

A full course listing with course titles and descriptions is provided in Appendix A.

Persons eligible for admission to the certificate program must be enrolled in a masters or doctoral degree program or be a post-doctoral fellow at Johns Hopkins University's Schools of Public Health, Medicine, or Nursing. School of Medicine residents and fellows are also eligible. In addition, the certificate program will be offered to non-degree students with at least a baccalaureate degree from an accredited college or university with three years (full-time equivalent) professional experience in a health care related field.

JHSPH master's and doctoral degree students do not need to formally apply to the certificate program. However, they must complete a declaration of intent form to inform the faculty sponsors of their interest in the certificate program prior to beginning coursework, in order to receive priority seating in courses with maximum enrollments, and to receive advice on course selections.

Non-degree students, master's and doctoral students from the Schools of Nursing and Medicine, and Hopkins fellows, residents, and post-doctoral fellows are required to submit an online application through the Bloomberg School's Admissions Office. The application includes official transcripts from all post-secondary schools, a letter of recommendation, a statement of purpose, and a CV. School of Medicine and Nursing students must have written approval from their academic advisors to pursue the certificate. Applications are reviewed by a committee of faculty who will determine the admissions decision.

Students are required to complete a minimum of 18 term credits of coursework. All courses must be taken for letter grade and a 2.75 grade point average in order for the certificate to be granted. Requirements must be completed within three years of being accepted into the certificate program. All courses are taught by faculty of the Bloomberg School. The listing of the certificate program prerequisite courses, required courses and elective courses is given in Table 1. Underlined/bolded course numbers reflect new courses that we are also seeking approval.

Table 1				
Course Number	Course Title	Credits	Online Term	Campus Term
Required Pre-requisites to be completed before starting course work				
	Introduction to Online Learning	0	1,2,3,4,Su	
550.860	Academic and Research Ethics at JHSPH	0	1,2,3,4,Su	
Required Courses				
312.603	Fundamentals of Budgeting and Financial Management	3	1,2,3,4,Su	
Students should choose between 221.602 or 312.600				
221.602	Applications in Managing Health Organizations in Low and Middle Income Countries	3	-	1
312.600	Managing Health Services Organizations	4	3	
Elective Courses:				
221.604	Case Studies in Management and Decision Making	3	-	3
221.608	Managing Non-Governmental Organizations in the Health Sector	3	-	3
221.654	Systems Thinking in Public Health: Applications of Key Methods and Approaches	2	3	
300.651	Introduction to the US Healthcare System	4	4	
309.600	Evaluating Quality Improvement and Patient Safety Programs	3	1	WI
309.620	Managed Care and Health Insurance	3	-	3
309.631	Population Health Informatics	3	2	
309.730	Patient Safety & Medical Errors	3	3	
311.615	Quality of Medical Care	3	1	
312.604	Quantitative Tools for Managers	3	-	2,3
312.610	Foundations of Organizational Leadership	3		Su,2,3
312.617	Fundamentals of Financial Accounting	3	2	
312.620	Performance Measurement in Health Care	2	-	SI
312.621	Strategic Planning	3	-	S,4, SI
312.623	Financial Management in Healthcare I	3	-	3
312.624	Financial Management in Healthcare II	3	-	4
312.633	Health Management Information Systems	3	3,4	
312.635	Human Resources in Health Organizations	2	-	4,SI
312.636	Supply Chain management	2	-	SI
312.655	Organizational Behavior and Management	2	-	4
312.660	Marketing in Health Care Organizations	3	-	3,4,SI
312.670	Negotiation in Health Care Settings	3	-	4
312.693	Introduction to Comparative Effectiveness and Outcomes Research	3	3	
313.610	Health Economics for Managers	3	2	-
Students may select either 313.641 or 319.790 as an elective, but not both				
313.641	Introduction to Health Economics	3	3	-
313.790	Introduction to Economic Evaluation	3	4	
Students may choose either 312.678 or 309.732 as an elective, but not both				
312.678	Introduction to Healthcare Quality and Patient Safety: A Management Perspective	2	-	3
309.732	Human Factors in Patient Safety	3	-	4
Students completing the certificate program entirely online would need to take the following courses: 300.651 (may request permission to take 221.654 instead) 312.600, 312.603, 312.610 (may request permission to take 311.615 instead), 312.617, 312.633				

2. Educational objectives and student learning outcomes

Upon successful completion of the modified PBC in Health Finance and Management, students will be able to:

- Describe the organization and primary financial systems of the U.S. healthcare delivery system
- Describe current key policy and programmatic health care payment methodologies, and the impact of evolving value-based models.
- Describe and apply key models (e.g. ACO) to optimize health care organization and delivery.
- Evaluate various models of management and leadership, and leadership traits and characteristics necessary to meet the needs of complex and collaborative health care delivery systems.
- Discuss challenges and opportunities related to the use and integration of data, data-gathering, and other aspects of health care information systems to improve efficiency and effectiveness within the health care delivery system.

3. General education requirements

Not applicable

4. Specialized accreditation/certification requirements

Not applicable

5. Contractual agreements with other institutions

Not applicable

C. Critical and compelling regional or statewide need as identified in the State Plan

1. Demand and need for program

The JHSPH Department of Health Policy and Management (HPM) has offered management and leadership courses since its inception. The PBC in Healthcare Finance and Management is ideal for individuals seeking professional development or specialized knowledge in healthcare leadership and management. The mix of required and elective courses offered online draws upon the rigorous JHSPH Master of Healthcare Administration (MHA.) degree program, which is accredited by the Commission on Accreditation of Healthcare Management Education. Through this certificate program, students can develop the professional skills that will help position them for success in their chosen profession.

With the passage of the Affordable Care Act, the growth in the demand for courses providing contemporary perspectives on key issues and challenges related to management and leadership by the healthcare industry in the region, around the country, and the world has made the need for a certificate program like this more apparent. For busy working professionals, flexibility is very important, as is the ability to continue their education in the face of work demands. Online offerings of the certificate courses will create scheduling flexibility and increase course choices for students pursuing the onsite programs. They will also accommodate students who must leave the area due to military deployment or relocation by their employer. Online offerings will allow the HPM department to retain students with frequent business travel or job assignments outside of this region, as well as those with personal commitments requiring schedule flexibility. In addition, the online offering will meet the needs of clinicians who are increasingly being engaged by health care delivery systems in leadership roles, allowing them to develop a basic set of skills necessary to be an effective member of the management team.

For these reasons, the HPM department identified a need to offer this certificate program in an online format and is committed to the development of such a program. The online courses indicated in the proposed curriculum are existing courses and are offered in the context of current degree offerings.

2. Alignment with Maryland State Plan for Postsecondary Education

The 2013–2017 Maryland State Plan for Postsecondary Education articulates six goals for postsecondary education: 1) quality and effectiveness; 2) access, affordability and completion; 3) diversity; 4) innovation; 5) economic growth and vitality; and 6) data use and distribution. This certificate program addresses five of these goals.

One of JHSPH's goals is to prepare highly trained scientists and healthcare professionals to work in organizations where they can contribute to the public health needs of society. The long-term success of JHSPH's programs for working professionals attests to the quality and effectiveness of these programs, thus directly supporting the quality and effectiveness goal (Goal 1) in the State Plan. By leveraging technology in innovative ways to make JHSPH certificate offerings more accessible and interactive, candidates can pursue "anytime, anywhere" learning opportunities. Candidates can undertake course-related activities at a time and location most convenient to them, allowing them to participate in courses and complete their program even if their work schedules do not permit regular class attendance or if they move away from the Maryland region, thus supporting the completion goal (Goal 2) and the innovation goal (Goal 4) in the State Plan. Typically, part-time students with full-time jobs represent a broader range of diversity than students in full-time degree programs. In targeting these part-time students, this program addresses the diversity goal (Goal 3) in the State Plan. In turn, the program, through the preparation of highly qualified healthcare professionals, also contributes to the economic growth and vitality goal (Goal 5) by providing life-long learning to scientists and healthcare professionals so they can maintain the skills they need to succeed in the workforce.

D. Quantifiable and reliable evidence and documentation of market supply and demand in the region and State

1. Market demand

The Bureau of Labor Statistics projects growth in the employment of medical and health service managers to be much faster than the average for all other occupations, an increase of 17% from 2014 – 2024. Aging baby-boomers will drive an increased demand for medical services, requiring more healthcare workers (physicians and others) and more healthcare facilities. This expansion in medical services will necessitate a parallel expansion in healthcare managers who can manage both medical information and healthcare staff. The use of electronic health records (EHRs) will not only require those with knowledge of healthcare information technology (HIT), but also health service managers able to organize and integrate EHR records in a variety of healthcare settings.¹

In recent years the demand for clinicians, especially physicians, to understand and participate in the effective design and management of health care delivery systems has escalated. In particular, the federal government and Maryland's move to make the payments to providers based on population-level metrics makes having a public health background essential. These providers require an essential understanding of finance, value-based payment methodologies, operations management, leadership in a team-based organizations, and population-based care practices. In addition to traditional health systems management, the program will differ from other competitors' offerings by integrating the population-health perspective. Offering the PBC online will allow actively employed clinicians the ability to get important credentials in a more accessible education modality.

Competitors offering traditional hospital operations certificate options online include Seton Hall, UCLA, and Cornell. The Johns Hopkins Carey Business School's Business of Health Certificate is also similar. While many of the courses offered in the Carey certificate originate in the Bloomberg School of Public Health, the proposed online JHSPH certificate program is based on a long-standing focus on health care management and financing as demonstrated by JHSPH's Master in Health Administration degree, Master in Health Services degree, and existing onsite certificate program in Healthcare Finance and Management.

2. Educational and training needs in the region

With the passage of the Affordable Care Act and subsequent efforts to transition from a volume-based to a value-based reimbursement system, health systems have focused on three major elements: reducing the cost of care per capita, expanding access and delivery system capacity, and improving the patient experience. The significance of these changes is being felt more in Maryland than in any other state due to the unique rate-setting system in place. In support of these efforts, physicians are increasingly engaged in efforts

¹ Bureau of Labor Statistics (<http://www.bls.gov/ooh/management/medical-and-health-services-managers.htm#tab-6>, accessed June 3, 2016)

to redesign the care delivery process to be more efficient (i.e. reduce costs), to be more effective (i.e. improve outcomes and experience), and participate in the formulation of broader strategic activities and collaborations. The skills necessary to participate in these activities are not inherently found in medical education. Increasingly, clinicians are turning to traditional programs such as the Master's in Health Administration to get the requisite skills. These programs are still largely classroom-oriented and require 2-year commitments. The proposed modification provides an alternative that emphasizes convenience and a focus on the essentials, allowing those who do not have the time to commit to a full master's degree to enhance their skills.

3. Prospective graduates

The data available on the Maryland Higher Education Commission's website regarding the number of professionals earning a certificate in healthcare management or administration indicates some fluctuation as many institutions have updated their certificates in the last two years. Despite these fluctuations, the Enrollment Trends Data file reflects increasing interest in the field as graduate study enrollment in Healthcare Management programs have grown steadily.

Enrollment in Graduate Programs in Healthcare Management

School	Certificate Title	Number of Graduates by Year				
		2010	2011	2012	2013	2014
Johns Hopkins University, Carey Business School	Business of Medicine/ Business of Health Care	25	27	30	64	3
Towson University	Clinician to Administrator Transition	0	9	2	9	4
University of Maryland, University College	Health Care Administration	5	8	7	13	5

During the last two academic years there have been 45 graduates who completed the onsite certificate program. Approximately 35-50 students enroll annually, and there is no reason to expect this number to decrease in the foreseeable future. Rather, we estimate this number to grow given the opening of global horizons by the online format.

E. Reasonableness of program duplication

1. Similar programs

School	State	Certificate Title	Credits	Time to Completion	Online?
Johns Hopkins University, Carey School of Business	MD	Business of Health Care	15	2 years	Yes
Towson University	MD	Clinician to Administrator Transition	15	1 year	No
University of Maryland, University College	MD	Health Care Administration	18	1 ½ years	Yes
Seton Hall University	NJ	Healthcare Administration	15	1 ½ years	Yes

As referenced in Section D1, there are certificate programs related to health care management offered by other universities, none are considered in the geographical area; Seton Hall University is located in South Orange, NJ. The most similar offering of an online certificate program with similar course offerings is the Johns Hopkins Carey Business School's Business of Health certificate program. The PBC in Health Finance and Management brings a population health focus from experts in the field and the number 1 ranked school of public health.

2. Program justification

In view of the market demand for health care administrators, physician executives, and the need to provide the convenience of online access to JHSPH's educational content, the proposed modification meets a growing need nationally to receive an online credential from an internationally renowned school of public health. The PBC in Health Finance and Management is ideal for individuals seeking professional development or specialized knowledge in healthcare leadership and management and essentials of population health management. The mix of required and elective courses offered online draws upon the rigorous Master of Healthcare Administration (MHA) degree program, which is accredited by the Commission on Accreditation of Healthcare Management Education. Through this certificate program, students can develop the professional skills that will help participants position themselves for success in their chosen profession.

F. Relevance to Historically Black Institutions (HBIs)

By definition, an appropriate student for the certificate program would apply after attending and completing a baccalaureate degree at any undergraduate institution, including any of Maryland's Historically Black Institutions. The proposed program would not directly affect the implementation, maintenance, uniqueness, identity or mission of these institutions.

There are no known certificate programs in Health Finance and Management in any of the Historically Black Institutions in Maryland.

G. Evidence of compliance with the Principles of Good Practice

See Appendix B for the evidence that this program complies with the Principles of Good Practice noted above.

H. Adequacy of faculty resources

Please see Appendix C for a list of active faculty members, their affiliations, and degrees.

The Bloomberg School's Department of Health Policy and Management serves the full-time and part-time graduate education needs of public health professionals interested in the disciplines of health policy, healthcare finance, management and leadership, quality, safety, and outcomes research in the central Maryland region and beyond. Hence, HPM strives to provide exceptional public health education rooted in practice. As a result and by design, the division relies heavily on full-time faculty, and practitioner faculty, many of whom are part-time, with the necessary experience to educate practicing healthcare professionals. All faculty members are highly qualified, distinguished and experienced professionals, virtually all of whom have doctorates in their fields of expertise. Each has demonstrated a strong commitment to excellence in teaching. Most are practicing professionals, academicians, or researchers affiliated with the School or the Johns Hopkins School of Medicine.

I. Adequacy of library resources

The book collections at the Johns Hopkins University number almost 2.5 million volumes, selected to support the academic and research interests of all departments and divisions of the University. The system includes The William H. Welch Medical Library in the School of Medicine, the Abraham M. Lilienfeld Library in the School of Public Health, and the Milton S. Eisenhower Library on the Homewood campus. The Abraham M. Lilienfeld Library is the primary resource within JHSPH for information in the fields of public health, management science, and the social sciences. The library provides access, via the Johns Hopkins Medical Institution online catalog and specialized bibliographic databases, to information in all areas of interest to JHSPH students and faculty. The total library collection is now approximately 30,000 volumes of books, pamphlets and government reports, with a strong emphasis in epidemiology, infectious diseases, health policy and management, the social aspects of health care, and HIV and the AIDS pandemic. Most periodicals are available to University faculty, staff and students online from any location in the world. All facilities have access to online databases in addition to a distinguished collection of research resources. The interlibrary loan department makes the research collection of the nation available to faculty and students.

J. Adequacy of physical facilities, infrastructure and instructional equipment

All courses in the modified program will be offered online. The program will have no discernable impact on the use of existing facilities and equipment beyond the standard requirements already in place; primarily, faculty office space in an existing university facility location. No additional facilities, infrastructures or laboratory or computer resources will be required.

The central computing resource for the School, the Office of Information Technology (IT), provides students with reliable computing infrastructure, location, and device independence, and critical software tools. Additionally, an enterprise service desk offers support for faculty, staff, and students. Assistance is provided over various channels, including phone, desktop, and FIPS 140-2 compliant remote-control support. Customer satisfaction is monitored and benchmarked against other higher educational institutions and industries.

K. Adequacy of financial resources with documentation

See Appendix D for detailed financial information.

L. Adequacy of provisions for evaluation of program

As part of the program design and approval process, student learning outcomes and assessments are aligned with the academic goals of the School and approved by JHSPH's Committee on Academic Standards. All courses are individually evaluated by students at the conclusion of every term by the University. Additionally, feedback regarding the appropriateness of course content in terms of the overall certificate program will be solicited from students at the conclusion of every course. The program committee will meet annually to assess course evaluations and other feedback provided by students, faculty and other stakeholders in the program. Based on these data, the program committee will implement changes to the program (in terms of curriculum content, course delivery mechanisms, etc.) as necessary.

M. Consistency with the State's minority student achievement goals

Any student meeting the admissions requirements can apply to the PBC in Health Finance and Management. The program will work to help all accepted students improve their workplace competitiveness and reach their professional goals, an aim consistent with the State's minority student achievement goals.

N. Relationship to low productivity programs identified by the Commission

Not applicable

Appendix A

Course List and Descriptions

Introduction to Online Learning (0 credits)

Introduction to Online Learning (IOL) is a mandatory course that will prepare a learner and his or her computer for taking an online course offered through the Johns Hopkins Bloomberg School of Public Health. Attention is focused on learner responsibilities and communication strategies in online courses. Course instructors do not assume that anyone taking the course is a computer expert, although it is expected that all online students have a good, basic understanding of how to operate a computer.

Prerequisite: None

221.602 Applications in Managing Health Organizations in Low and Middle Income Countries (3 credits)

Using case studies, a simulation, and group-based activities, supplemented by required weekly online lectures and readings, students explore a variety of settings found in low and middle-income countries in which to apply management concepts. Students examine: (1) organizational restructuring in response to decentralization, (2) environmental scanning, (3) systems behavior in hospital organizations, (4) multiple approaches to group decision making, (5) managing to achieve agreement in health organizations, (6) preparing, implementing, and communicating a budget that is based on limited resources within a business, (7) performance improvement concepts and tools in a healthcare organization, and (8) the construct of a "balanced score card" for a health organization. Students apply these concepts to the activities and assignments in this management skills learning lab.

221.604 Case Studies in Management and Decision-Making (3 credits)

Students analyze problems and develop strategies based on real dilemmas faced by decision-makers. Students formulate positions before class and actively participate in discussion during class. Cases come from both International and U.S. settings, and deal with issues such as: conflict between budget and program offices, working with governing boards, contracting between government and non-government providers, dysfunctional clinics, reforming hospitals, managing local politics, cutting budgets and collaborating in informal organizations. Develops skills in leadership, negotiation, analysis, communication, and human resource management.

221.608 Managing Non-Governmental Organizations in the Health Sector (3 credits)

Familiarizes students with the key competencies required for managing NGOs in the health sector. Though many of the situations described in the lectures are taken from the instructor's experiences in managing international NGOs in developing countries, the material presented is applicable in organizational settings in developed countries as well. Topics correspond to the key responsibilities of NGO or health program directors. Lectures present guidelines, best practices, and management tools for the area of responsibility followed by a discussion of the lecturer's and students' experiences on those topics. Readings, which provide background information, are assigned for each class.

221.654 Systems Thinking in Public Health: Applications of Key Methods and Approaches (2 credits)

Systems thinking, (ST), is a holistic approach to analyzing how components of complex systems interact and adapt. Through systems thinking we can understand how societies organize themselves to achieve collective health goals and how different actors contribute to policy outcomes. The practice of systems thinking includes the ability to integrate multiple perspectives and synthesize them into a framework or model that encompasses the various ways in which a system might react to policy choices. Provides students with an understanding of how to apply ST in public health. Trains students on the fundamentals of ST theory and offers an opportunity to apply key methods and approaches to health policy and health questions. Prepares students to ask relevant research questions and apply a ST lens to describe, understand, and anticipate complex behavior. Examines how systems models can be critically appraised and communicated with others so public health policy makers can exercise a greater degree of wisdom and insight.

300.651 Introduction to the US Healthcare System (3 credits)

Focuses on the organization, financing, and delivery of healthcare in the U.S. Contrasts the private and public sectors and examines the effects of market competition and government regulation. Examines the ways that medical providers are paid, and explores the major issues currently facing physicians, hospitals, and the pharmaceutical industry. Also discusses several potential small and large scale reforms to the U.S. healthcare system and evaluates their likely effects on healthcare spending, quality of care, and access to care.

309.600 Evaluating Quality Improvement and Patient Safety Programs (3 credits)

Prepares students to evaluate Quality Improvement/Patient Safety (QI/PS), projects by developing their competencies in the following areas: 1) Critiquing evaluations of QI/PS projects; 2) Designing a robust evaluation of a QI/PS project; and 3) Conducting a small scale qualitative study.

309.620 Managed Care and Health Insurance (3 credits)

Presents an overview of major issues related to the design, function, management, regulation, and evaluation of health insurance and managed care plans. Provides a firm foundation in basic concepts pertaining to private and public sector health insurance/benefit plans, both as provided by employers and government agencies such as Medicaid and Medicare. Key topics include population care management techniques, provider payment, organizational integration, quality and accountability, cost-containment, and public policy. Uses outside experts extensively.

Prerequisite: 300.651 or similar course

309.631 Population Health Informatics (3 credits)

Introduces students to concepts, methods, and issues related to the application of health information technology (HIT) to population health. Emphasizes the population health potential of comprehensive electronic health records (EHRs), personal health records (PHRs), mobile health and telemedicine devices; and consumer focused internet-based tools. Covers the uses of HIT to define and identify populations and sub-populations of interest, describe the health status and needs of populations, improve the health of populations, and evaluate services provided to populations. Emphasizes the use of HIT within both local, regional and federal public health agencies and population-based private health care organizations such as integrated delivery systems and health insurance plans. Lessons are mainly US oriented but are also applicable to other high and middle income countries.

309.730 Patient Safety and Medical Errors (3 credits)

Provides an introduction to the science of safety, and how it relates to problems with patient safety in health care. Explores the extent and nature of safety problems through discussion of important papers and reports. Uses case as the basis for understanding factors that cause, mitigate, and prevent errors and patient harm. Emphasizes the role of both individuals and systems in improving patient safety. Teaches how to conduct incident investigations, understand advantages and limitations of error reporting, how to disclose bad news, and use models that can be used to improve safety in health care organizations.

309.732 Human Factors in Patient Safety (3 credits)

Provides students with the essential concepts, methods and tools to enable them to design effective patient safety interventions and evaluate their impact.

311.615 Quality of Medical Care (3 credits)

Introduces quality issues, including the extent to which customary care for specific health problems improves quality of life and reduces mortality, and quality assessment and assurance performed by caregivers, professional societies, government-sponsored professional review organizations, and government and other third party organizations who pay for care. Provides a basis to judge the effectiveness of quality assessment and assurance activities and to begin to develop programs.

312.600 Managing Health Services Organizations (4 credits)

Presents a framework for understanding and managing health services and health sector organizations. Discusses strategic and organizational management [e.g., health care environment, stakeholders and customers, missions, vision and values, governance, organizational structure and design]; management & performance improvement tools [e.g., budgeting and financial management, logistics, continuous quality improvement, balanced scorecard, logical framework, learning networks and collaborative] management role and functions [e.g., leadership style, employee performance, decision-making, human resource management]

312.603 Fundamentals of Budgeting and Financial Management (3 credits)

Explains the role of budgeting as a key component of the administrative process. Students learn to develop a budget and evaluate the financial status of a department or operating unit and determine what, if any, corrective actions need to be taken. Presents various analytical methods in management decision making, including benefit/cost ratio analysis, variance analysis, and break-even analysis. Also includes approaches to benchmarking, productivity improvement techniques, and methods for building cost standards.

312.604 Quantitative Tools for Managers (3 credits)

Examines how information processing power can be applied to increase quality and decrease cost in healthcare. Emphasizes the importance of understanding analytics as a healthcare manager. Focuses on five themes related to managing a healthcare organization: finance, quality, market, operations, and utilization. Reviews theories such as data formats, database structures, and analysis methods. Explains how data is collected, prepared, and applied to make a positive impact. Real world examples provided during each session so that students can use the lecture materials to solve problems. Develops future healthcare leaders who can understand the details as well as think critically beyond the data.

312.610 Foundations in Organizational Leadership (3 credits)

Students develop an understanding of the role expectations of the organizational leader and the essential knowledge and skills the role requires. Provides a framework for understanding the process of working effectively with, influencing and leading others. Drawing from a variety of disciplines, emphasizes organizational effectiveness, developing a future vision and direction, leading change and building adaptive organizational cultures.

312.617 Fundamentals of Financial Accounting (3 credits)

Provides both a theoretical foundation and practical application to contemporary accounting principles and practices. Emphasizes accounting as the “language of business” with the pragmatic approach of learning the types and uses of financial statements, both external and internal. Topics include a review of the accounting cycle; understanding the environmental needs that drive the requirements for financial statements; a “hands on” review of how accounting events are recorded, resulting in the compilation of financial statements; and a review of external and internal financial statements.

312.620 Performance Measurement in Health Care (2 credits)

Focuses on performance measurement for hospitals and describes key aspects and challenges of measurement initiatives in the current context of health care reform in general, and payment reform more specifically. The faculty, all senior health care professionals from the trenches, describe the regulatory environment, and Joint Commission and CMS requirements. They also summarize key measures used for public reporting and payment such as chart-abstracted clinical process, administrative data based outcomes, satisfaction, and efficiency. Highlights the advantages and disadvantages of each type of measure and discusses appropriate use of analytics and comparison data including patient satisfaction. Covers current public reporting and pay for performance initiatives and associated challenges. Another topic is emerging initiatives in the context of the electronic medical records, such as e-measures and meaningful use.

312.621 Strategic Planning (3 credits)

Focuses on principles of strategic management and competitive analysis to support strategy development for health care organizations. Provides an understanding of how current business and management knowledge is applied to health care organizations to promote future success and competitive advantage. Examining contemporary theory and models, students learn to assess and develop an organization's mission and vision; perform an internal and external strategic assessment; evaluate competitive threats and responses; develop organizational strategies and measures of success; and evaluate the decision-making approaches best able to develop and execute the best strategies.

312.623 Financial Management in Healthcare I (3 credits)

Focuses on principles of strategic management and competitive analysis to support strategy development for health care organizations. Provides an understanding of how current business and management knowledge is applied to health care organizations to promote future success and competitive advantage. Examining contemporary theory and models, students learn to assess and develop an organization's mission and vision; perform an internal and external strategic assessment; evaluate competitive threats and responses; develop organizational strategies and measures of success; and evaluate the decision-making approaches best able to develop and execute the best strategies.

Prerequisites: 312.603, 312.617

312.624 Financial Management in Healthcare II (3 credits)

Case studies present an overview of financial theory and financial management principles and concepts in a health care setting. Topics include discounted cash flow analysis, long-term debt financing, equity financing, lease financing, capital budgeting, analysis, and forecasting.

Prerequisites: 312.603, 312.617, 312.623

312.633 Health Management Information Systems (3 credits)

Provides a broad overview of healthcare information systems with emphasis on historical foundations, current issues, and industry pressures pushing modernization and increased sophistication in the use of technology. Major topics include an overview of healthcare use of information technology, medical informatics, public health informatics, information technology infrastructure, ethics in computing, computer security, consumer informatics, clinical software, computing in clinical education, research computing, health information exchange, and the future of healthcare computing.

312.636 Supply Chain Management (2 credits)

Supply Chain Management is the processing of managing the supply of goods, products or services from a supplier of raw materials or components to the manufacturer to the distributor to the wholesale buyer to the customer. Participants in this course will learn the 'best practices' from supply chain experts and healthcare leaders. Focuses the theories of supply chain management to hospitals and other health care delivery organizations. Areas of study include purchasing, inventory control and management, materials management, warehousing and transportation. Additionally, strategies involving supply chain integration, planning, global logistics and financial and customer service metrics to improve overall system performance are examined.

312.655 Organizational Behavior and Management (2 credits)

Explores organizational behavior perspectives and theories, which provide the framework for the critical study of management, and the interpersonal skills and knowledge required by managers in the dynamic health sector. Students develop an approach to thinking about health sector organizations and their complexity. Emphasizes current thinking and the application of theory to practice in the areas of management, employee motivation, group behavior and team development, power and influence plus conflict management and negotiation skills.

312.660 Marketing in Health Care Organizations (3 credits)

Introduces students to marketing concepts in health care through readings, guest speakers, small group exercises and individual study. Students learn how to conduct a situational analysis, understanding the market and consumer behavior as well as assessing the capabilities of the organization. Explores primary and secondary market research techniques. Discusses marketing strategy, including positioning and branding, program/service development, pricing, distribution, and promotion. Evaluation and measurement methods are explained.

312.670 Negotiation in Health Care Settings (3 credits)

Addresses the basic skills needed for effective negotiation of business relationships in health care and other settings. Focuses on understanding and developing a systematic approach to preparing for, structuring, and negotiating key business relationships. Presents basic process and conflict management skills needed for effective negotiation of business relationships in health care. Also explores the ethics of negotiation.

312.678 Introduction to Healthcare Quality and Patient Safety: A Management Perspective (2 credits)

Introduces students to the latest thinking on healthcare quality and patient safety improvement through didactic sessions, interactive exercises and case studies that have direct relevance for the public health practitioner, healthcare administrator or clinician. Focuses on the specific domains of healthcare quality and patient safety based on the strategies recommended by the Institute of Medicine report "To Err is Human." Examines healthcare quality and patient safety from a strategic viewpoint with the goal of making healthcare administrators into effective decision makers.

312.693 Introduction to Comparative Effectiveness and Outcomes Research (3 credits)

In the last few years, comparative effectiveness research has surged to the forefront of political and academic consciousness in the US. This course provides an introduction to the motivation and methods of this rapidly evolving field. Reviews the problems faced by decision makers across the US health care system, and reviews priority topics for investigation. Explains the role of stakeholders, including payers, manufacturers, health care organizations, professional groups, providers and patients. Explains study designs and methods used in effectiveness research, focusing in particular on observational studies, but also on newer trial designs. Addresses the policy implications of this research. **Special Comments:** CER is the generation and synthesis of evidence that compares the benefits and harms of alternative methods to prevent, diagnose, treat and monitor a clinical condition, or to improve the delivery of care. The purpose of CER is to assist consumers, clinicians, purchasers, and policy makers to make informed decisions that will improve health care at both the individual and population levels

313.610 Health Economics for Managers (3 credits)

Applies the analytical tools of economics to issues in health care that are especially relevant to managers and leaders of health care organizations. Examines topics including: the use of economic incentives to influence health behavior; asymmetric information and the role of agency in health care; the application of behavioral economics to health care; government as payer and regulator, and equity/ethical considerations; the role of health insurance; and the theory of the firm as it applies to physicians, hospitals, and systems.

Prerequisite: 313.639 Introduction to Microeconomics, or equivalent course in basic microeconomics.

313.641 Introduction to Health Economics (3 credits)

Introduces students to the application of economic tools to the interaction among the many stakeholders in the health care system and the public health system. Intended for those students who want an overview of health economics, but who do not expect to pursue additional courses in the field. Uses a standard health economics text as the main reading; also draws on articles from the popular press and professional journals that illustrate the tools of economics or their application to health care and public health issues.

313.790 Introduction to Economic Evaluation I (3 credits)

Prepares students to read and interpret cost-effectiveness studies. Introduces the basic economic concepts that are needed in order to understand the recommendations from the United States Panel on Cost Effectiveness in Health and Medicine, such as the distinction between opportunity costs and budgetary costs. Considers review recommendations, particularly as they apply to cost-effectiveness research reports. Discusses the relationship between cost-effectiveness results and other elements of the health care policy decision-making process.

550.860 Academic & Research Ethics at JHSPH (0 credits)

Examines academic and research ethics at JHSPH in a series of online interactive modules. Focuses on information about the academic ethics code and responsible conduct of research at the School. Explores issues of academic integrity such as proper ethical conduct and referencing, and discusses violations such as plagiarism and cheating, relative to case studies that illustrate situations faced by students and faculty in the academic setting. Addresses topics that include responsible conduct of research, authorship, data management, data ownership, guidelines for professional conduct, research fraud or scientific misconduct, federal and institutional guidelines related to research using human and animal subjects and ethical issues involving vulnerable subjects in research.

Appendix B

Evidence of Compliance with the Principles of Good Practice (as outlined in COMAR 13B02.03.22C)

(a) Curriculum and Instruction

- (i) **A distance education program shall be established and overseen by qualified faculty.**

This is already a well-established onsite program; many of the faculty teaching in the onsite program also serve as online instructors. New instructors will be required to meet the same qualifications as those teaching in the traditional site-based program. Online courses are supported by the School's Center for Teaching and Learning (CTL), which offers an array of evidence-based programs and services that support innovative teaching methods that encourage critical thinking skills online.

- (ii) **A program's curriculum shall be coherent, cohesive, and comparable in academic rigor to programs offered in traditional instructional formats.**

All courses in the online program are either currently also being offered in the traditional, onsite program or have been taught at least twice face to face before the course was converted for online delivery. All of the School's online courses adhere to CTL's formal course development process with support from experienced instructional designers. Online coursework follows well-established curriculum development standards, tailoring delivery methods, content, and assessments to learning objectives. Randomized empirical research suggests that an online course can be as rigorous, effective, and well received as an onsite version of the same course. Each term the School compares student course evaluations for onsite and online courses; these comparisons consistently yield very similar results.

- (iii) **A program shall result in learning outcomes appropriate to the rigor and breadth of the program.**

The program learning outcomes (competencies) are derived with input from professionals within the discipline, the program faculty, program leadership, and other program stakeholders, and are reviewed by JHSPH's Committee on Academic Standards. The desired program outcomes are identical to those achieved in onsite programs.

- (iv) A program shall provide for appropriate real-time or delayed interaction between faculty and students.**

The PBC in Health Finance and Management will be delivered via the School's course delivery and management system – Course Plus. This platform supports asynchronous interaction between faculty and students. Students and faculty also have the option to participate in optional 'real-time' interaction through weekly web-conference office hours, supported by Adobe Connect, and pre-scheduled LiveTalks.

- (v) Faculty members in appropriate disciplines in collaboration with other institutional personnel shall participate in the design of courses offered through a distance education program.**

The program has established a process for identifying the appropriate faculty to design an online course. All faculty members are selected based on domain expertise, program-related teaching experience and completion of a required online course development training course. Faculty are fully supported by CTL experts.

(b) Role and Mission

- (i) A distance education program shall be consistent with the institution's mission.**

Refer to Section A.1 in the main body of the proposal.

- (ii) Review and approval processes shall ensure the appropriateness of the technology being used to meet a program's objectives.**

All courses offered online are designed in conjunction with CTL and with the support of an instructional designer, multimedia producers, and web specialists. These individuals assist in identifying and recommending the most effective learning technologies for achieving the course learning objectives. The course instructor(s) consults with an instructional designer during the course design process to determine the most effective learning technologies and strategies needed to meet the course learning objectives. The course design goes through multiple reviews by the instructional designer and program directors. Program directors ensure that the course design meets the program's expectations for online courses and that the course learning objectives reflect what the program expects students to achieve after completing the course. The CTL design team continually monitors courses and consults with the instructors to make adjustments, if needed. All new online courses participate in a midterm and end-of-term course evaluation process. Midterm feedback is used to determine if any mid-term adjustments are needed and the end-of-term feedback is used to assess whether further course refinements are needed prior to the next time the course is offered.

(c) Faculty Support

- (i) An institution shall provide for training for faculty who teach with the use of technology in a distance education format, including training in the learning management system and the pedagogy of distance education.**

Online certificate programs are supported by CTL, which offers a number of opportunities and resources for faculty instructors and teaching assistants to become more familiar with online teaching systems and best pedagogical practices. In addition to maintaining an extensive catalog of resources on these topics (an online Teaching Toolkit), CTL regularly offers events, workshops, and one-on-one office hours to introduce and provide updates on the latest advances in teaching technology and pedagogy. In addition to one-on-one guidance from an instructional designer, all faculty participate in an online teaching orientation session.

- (ii) Principles of best practice for teaching in a distance education format shall be developed and maintained by the faculty.**

Prior to teaching their first courses, all new online instructors are required to participate in training that conveys, among other things, principles of best practices in online education.

- (iii) An institution shall provide faculty support services specifically related to teaching through a distance education format.**

JHSPH, through CTL, maintains an innovative course management system and provides faculty support and training for online education through a staff of more than 30 individuals who specialize in instructional design, audio production, technical writing, web development, production management and quality control.

- (d) An institution shall ensure that appropriate learning resources are available to students including appropriate and adequate library services and resources.**

The Johns Hopkins University library system includes The William H. Welch Medical Library in the School of Medicine, the Abraham M. Lilienfeld Library in the School of Public Health, and the Milton S. Eisenhower Library on the Homewood campus. Most periodicals, including more than 13,000 journal subscriptions and multiple databases and catalogs, are available to University Faculty, staff and students online from any location in the world. The interlibrary loan department also makes the research collection of the nation available to faculty and students. The libraries offer a variety of instructional services, including electronic classrooms designed to explain the library resources available for research and scholarship. Students have access to all libraries and library informationists.

(e) Students and student services

- (i) A distance education program shall provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.**

JHSPH maintains numerous web-based resources to inform prospective students on the information they may need as an online student. These resources include the JHSPH website www.jhsph.edu and the Course Catalog. These resources offer detailed programmatic information, academic support services, financial aid, costs, policies, etc. and specific information for online learning. As new online students are admitted and enrolled, they receive timely emails with important information to help them prepare to become an online student. These emails include information on technical requirements, available academic support services, and a required orientation course (IOL) for new online students.

- (ii) Enrolled students shall have reasonable and adequate access to the range of student services to support their distance education activities.**

JHSPH online students have access to the following academic support services:

Academic advising. Students are assigned an advisor when accepted. Students work individually with the advisor to develop a course of study that meets the requirements of the program and the career goals of the student. The advisor regularly contacts the students to check on progress and answer questions. Courses that deviate from the program plan and have not been approved by an adviser may not count toward degree requirements.

Library services. Students have online access to the William H. Welch Medical Library in the School of Medicine, the Abraham M. Lilienfeld Library in the School of Public Health, and the Milton S. Eisenhower Library on the Homewood campus. The interlibrary loan department allows students access to resources at any other university in the nation. The library also provides easy access to a wide selection of electronic information resources, including the library's online catalog, and numerous electronic abstracting and indexing tools. Many of the databases are accessible remotely. Librarians are available to assist students remotely and the library maintains an extensive web site to take visitors through all its services and materials.

Disability Support Services. The Johns Hopkins University is committed to making all academic programs, support services, and facilities accessible to qualified individuals. Students with disabilities who require reasonable accommodations can contact the JHSPH Disability Services' Senior Director.

Career Services. The Career Services Office at the Bloomberg School of Public Health helps students, alumni, faculty, and staff and employers navigate the world of public health jobs.

Johns Hopkins Student Assistance Program. The Johns Hopkins Student Assistance Program (JHSAP) is a professional counseling service that can assist students with managing problems of daily living. Stress, personal problems, family conflict, and life challenges can affect the academic progress of students. JHSAP focuses on problem solving through short-term counseling. Accessing the service is a simple matter of a phone call to arrange an appointment with a counselor. Online students may call a phone number for consultation and will be directed to the appropriate resource or office. JHSAP services are completely confidential. The program operates under State and Federal confidentiality legislation and is HIPAA compliant.

Transcript Access. Students may view and print unofficial transcripts at any time. Official transcripts will be mailed to students upon completion of the program; additional official transcripts will be mailed upon request of the student at minimal charge.

Student Login IDs. The University issues each student a Johns Hopkins Enterprise ID (JHED ID) and the School issues a JHSPH ID. The JHED ID grants students a JHU email address and secure access to many online services including course registration, bill payment, official grades, library services, and the online learning platform CoursePlus. Students are also issued a JHSPH ID that provides access to the School's intranet (My JHSPH) where students can locate additional resources including research and administrative tools as well as the School's policy and procedures manual.

(iii) Accepted students shall have the background, knowledge, and technical skills needed to undertake a distance education program.

All accepted online students are required to have met the admission requirements stated for the certificate program. New online students are required to complete the "Introduction to Online Learning" course prior to beginning the first online certificate courses. This course covers a broad range of topics on how to be a successful online student such as: online student learning expectations, how to access the library, how to conduct online research, and how to participate in online discussions.

(iv) Advertising, recruiting, and admissions materials shall clearly and accurately represent the program and the services available.

All relevant certificate program information is available up to date on the JHSPH web site.

(f) Commitment to Support

- (i) Policies for faculty evaluation shall include appropriate consideration of teaching and scholarly activities related to distance education programs.**

Faculty who teach online courses are strongly encouraged to participate in one or two professional development opportunities annually to improve their online teaching skills. Teaching online is viewed no differently than teaching onsite for promotion purposes.

- (ii) An institution shall demonstrate a commitment to ongoing support, both financial and technical, and to continuation of a program for a period sufficient to enable students to complete a degree or certificate.**

JHSPH has a commitment to online teaching as demonstrated by the resources of its Center for Teaching and Learning (CTL), which provides course development, instructional, and technical support to new and current faculty. See Appendix D for detailed financial information regarding the proposed program.

(g) Evaluation and Assessment

- (i) An institution shall evaluate a distance education program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.**

Please see Section L of the main body of the proposal.

- (ii) An institution shall demonstrate an evidence-based approach to best online teaching practices.**

The Center for Teaching and Learning continually participates in professional development activities to keep abreast of evidence-based approaches to online teaching practices. These online teaching practices are then incorporated into the new online instructor training sessions.

- (iii) An institution shall provide for assessment and documentation of student achievement of learning outcomes in a distance education program.**

As part of the online course design process, course assessments are required to be aligned with stated courses learning objectives. The proposed program will incorporate authentic assessments that demonstrate students' application of learned skills. Program faculty have experience with developing individual and collaborative assessments for measuring the acquisition of relevant knowledge and skills through online learning.

(f) Commitment to Support

- (i) Policies for faculty evaluation shall include appropriate consideration of teaching and scholarly activities related to distance education programs.**

Faculty who teach online courses are strongly encouraged to participate in one or two professional development opportunities annually to improve their online teaching skills. Teaching online is viewed no differently than teaching onsite for promotion purposes.

- (ii) An institution shall demonstrate a commitment to ongoing support, both financial and technical, and to continuation of a program for a period sufficient to enable students to complete a degree or certificate.**

JHSPH has a commitment to online teaching as demonstrated by the resources of its Center for Teaching and Learning (CTL), which provides course development, instructional, and technical support to new and current faculty. See Appendix D for detailed financial information regarding the proposed program.

(g) Evaluation and Assessment

- (i) An institution shall evaluate a distance education program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.**

Please see Section L of the main body of the proposal.

- (ii) An institution shall demonstrate an evidence-based approach to best online teaching practices.**

The Center for Teaching and Learning continually participates in professional development activities to keep abreast of evidence-based approaches to online teaching practices. These online teaching practices are then incorporated into the new online instructor training sessions.

- (iii) An institution shall provide for assessment and documentation of student achievement of learning outcomes in a distance education program.**

As part of the online course design process, course assessments are required to be aligned with stated courses learning objectives. The proposed program will incorporate authentic assessments that demonstrate students' application of learned skills. Program faculty have experience with developing individual and collaborative assessments for measuring the acquisition of relevant knowledge and skills through online learning.

Appendix C

Faculty

Faculty	Terminal Degree	Field	Academic Title/Rank	Status	Courses taught
Sean Berenholtz	MD	Anesthesiology and Critical Care Medicine, and Health Policy and Management	Associate Professor	Full-time	312.678: Introduction to Healthcare Quality and Patient Safety
David Bishai	PhD	Population, Family and Reproductive Health	Professor	Full-time	221.654: Systems Thinking in Public Health: Applications of Key Methods and Approaches
Mark Bittle	DrPH	Health Policy and Management	Associate Scientist	Full-time	312.655 Organizational Behavior and Management
Greg Conderacci	MPP	Health Policy and Management	Associate	Part-time	312.660: Marketing in Health Care Organizations
Sydney Dy	MD	Health Policy and Management, and Internal Medicine	Associate Professor	Full-time	309.732: Human Factors in Patient Safety 311.615 Quality of Medical Care
John Ellis	BS	Health Policy and Management	Associate	Part-time	312.623: Financial Management in Healthcare I, 312.624: Financial Management in Healthcare II
Cyrus Engineer	DrPH	Health Policy and Management, and International Health	Assistant Professor - Adjunct	Part-time	221.602 Applications in Managing Health Organizations in Low and Middle Income Countries 312.600: Managing Health Services Organizations
Eric Ford	PhD	Health Policy and Management	Professor	Full-time	312.621: Strategic Planning
Chris Goeschel	ScD	Health Policy and Management	Associate	Part-time	312.678: Introduction to Healthcare Quality and Patient Safety
Ann-Michele Gundlach	EdD	Health Policy and Management	Adjunct Assistant Professor	Part-time	312.610: Foundations of Organizational Leadership

Faculty	Terminal Degree	Field	Academic Title/Rank	Status	Courses taught
Bradley Herring	PhD	Health Policy and Management	Professor	Full-time	300.651: Introduction to the US Healthcare System
Douglas Hough	PhD	Health Policy and Management	Professor	Full-time	313.610 Health Economics for Managers 313.641 Introduction to Health Economics
Jimmy Johnson	MBA	Health Policy and Management	Associate	Part-time	312.636 Supply Chain Management
K.H. Ken Lee	DrPH	Health Policy and Management	Assistant Professor-Adjunct	Part-time	312.604 Quantitative Tools for Managers
Stacey Lee	JD	Health Policy and Management	Assistant Professor	Full-time	312.670 Negotiation in Health Care Settings
Jill Marsteller	PhD	Health Policy and Management	Associate Professor	Full-time	309.600 Evaluating Quality Improvement and Patient Safety Programs 312.600: Managing Health Services Organizations
Nikolas Matthes	MD	Health Policy and Management	Adjunct Assistant Professor	Part-time	312.620: Performance Measurement in Healthcare
Michael Minear	MS	Health Policy and Management	Associate	Part-time	312.633: Health Management Information Systems
David Peters	MD, DrPH	International Health	Professor and Dept. Chair	Full-time	221.604 Case Studies in Management Decision- Making
Timothy Roberton	DrPH	International Health	Assistant Scientist	Full-time	221.608 Managing Non-Governmental Organizations in the Health Sector
Eric Roberts	PhD	Health Policy and Management	Associate	Part-time	313.790 Introduction to Economic Evaluation
Jodi Segal	MD	Health Policy and Management	Professor	Full-time	312.693 Introduction to Comparative Effectiveness and Outcomes Research
Paul Sokolowski	MBA	Health Policy and Management	Associate	Part-time	312.617 Fundamentals of Financial Accounting

Faculty	Terminal Degree	Field	Academic Title/Rank	Status	Courses taught
William Ward	MHA	Health Policy and Management	Associate	Part-time	312.603: Fundamentals of Budgeting and Financial Management
Jonathan Weiner	DrPH	Health Policy and Management	Professor	Full-time	309.620: Managed Care and Health Insurance 309.631: Population Health Informatics
Albert Wu	MD	Health Policy and Management	Professor	Full-time	309.730 Patient Safety and Medical Errors

Appendix D

Finance Information

TABLE 1: RESOURCES					
Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	-	-	-	-	-
2. Tuition/Fee Revenue	\$98,115	\$101,029	\$104,079	\$107,221	\$110,411
a. Number of F/T Students	1	1	1	1	1
b. Annual Tuition/Fee Rate	\$50,640	\$52,159	\$53,724	\$55,336	\$56,996
c. Total F/T Revenue (a x b)	\$50,640	\$52,159	\$53,724	\$55,336	\$56,996
d. Number of P/T Students	5	5	5	5	5
e. Credit Hour Rate	\$1055	\$1086	\$1119	\$1153	\$1187
f. Annual Credit Hour Rate	9	9	9	9	9
g. Total P/T Revenue	\$47,475	\$48,870	\$50,355	\$51,885	\$53,415
3. Grants, Contracts & Other	-	-	-	-	-
4. Other Sources	-	-	-	-	-
TOTAL (Add 1 – 4)	\$98,115	\$101,029	\$104,079	\$107,221	\$110,411

Resources narrative:

1. Reallocated Funds: No reallocation of existing resources will be required.
2. Tuition and Fee Revenue: Expectation of both full time and part time tuition revenues. Only one full time student will take certificate while completing their master's degree. The expectation is that we will have five professional part-time students complete the program on-line each year. The cost of both full time and per credit tuition cost subject to a 3% increase each year. Tuition will be the only resource to support the revenue to this program.
3. Grants and Contracts: No grant or contract support is anticipated.
4. Other Sources: No other sources are anticipated.

TABLE 2: EXPENDITURES					
Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b + c below)	\$80,400	\$82,812	\$85,296	\$87,856	\$90,491
a. # FTE	0.5	0.5	0.5	0.5	0.5
b. Total Salary	\$60,000	\$61,800	\$63,654	\$65,564	\$67,531
c. Total Benefits	\$20,400	\$21,012	\$21,642	\$22,292	\$22,960
2. Admin. Staff (b + c below)	-	-	-	-	-
a. # FTE	-	-	-	-	-
b. Total Salary	-	-	-	-	-
c. Total Benefits	-	-	-	-	-
3. Support Staff (b + c below)	-	-	-	-	-
a. # FTE	-	-	-	-	-
b. Total Salary	-	-	-	-	-
c. Total Benefits	-	-	-	-	-
4. Equipment	-	-	-	-	-
5. Library	-	-	-	-	-
6. New or Renovated Space	-	-	-	-	-
7. Other Expenses	\$35,000	\$36,050	\$37,132	\$38,245	\$39,393
TOTAL (Add 1 – 7)	\$115,400	\$118,862	\$122,428	\$126,101	\$129,88

Expenditures narrative:

1. Faculty: Includes total salary and benefits for faculty teaching the program. The benefits rate is 34.5%.
2. Administrative: No additional administrative staff is needed for the proposed program.
3. Support Staff: No additional support staff is needed for the proposed program
4. Equipment: No additional equipment is needed for the proposed program
5. Library: No additional library resources are needed for the proposed program.
6. New or Renovated Space: No additional space is needed for the proposed program.
7. Other Expenses: Costs for converting and upgrading course material to online format as well as the cost for faculty advisers to the certificate program.