

PhD Students at Jefferson’s College of Population Health Advance the Population Health Agenda through Courses they Design and Deliver

The College of Population Health at Thomas Jefferson University (JCPH) offers a PhD in Population Health Sciences that combines a broad grounding in this emerging field with a special focus in health policy, healthcare quality and safety, applied health economics, or behavioral

health sciences. Designed with the working healthcare professional in mind, the PhD program has attracted highly qualified applicants from a variety of industry sectors in the Philadelphia region. Consequently, entering students bring extensive real-world experience and expertise to the

learning community they join at JCPH.

Since its inception, the PhD program has recognized the importance of preparing its graduates to be effective educators, providing them with formal training in instructional design and hands-on experience with classroom management through a seminar in teaching and learning, PHS 620. In PHS 620, students work closely with their instructor and one another as they bring together their academic training and professional experience to the task of authoring and delivering a three-week course on a Population Health topic of their choosing. Throughout the course authoring process, design principles and development techniques are modeled directly on those applied by JCPH faculty to the College’s online Masters programs. Through this course, PhD students at JCPH have been developing their skills as instructors while ‘evangelizing’ for population health to a variety of workplace audiences.

The courses PhD students design and deliver are typically structured as ‘hybrid’ courses—the first week takes place in a conventional classroom or corporate training facility, the second week continues online, and the third week is conducted once again in a face-to-face setting. Each week of instruction is built on a carefully designed lesson holding specified learning objectives, readings, lecture, written assignments, discussion, application oriented activities, assessment, and student evaluation of their own learning. Through the lessons conducted across these three-week spans the PhD students engage closely with audiences in a range of industry sectors and academic settings.

Table 1. Courses Authored and Delivered by PhD Students at JCPH Through 2015

Topic of Study	Course Title(s)	Audience(s)
Research Methodology	<ul style="list-style-type: none"> • PCORI Methodology Standards for Conducting Patient-Centered Outcomes Research • Population Health Research • Community Based Participatory Research 	<ul style="list-style-type: none"> • Research team, Pharma • Research Fellows, Nemours • Field Researchers, international
Data Analytics	<ul style="list-style-type: none"> • Data Visualization for Population Health 	<ul style="list-style-type: none"> • Data Analysts, commercial health services
Preventive Care	<ul style="list-style-type: none"> • Why Vaccinate? • Foundations of Maternal, Child and Family Health 	<ul style="list-style-type: none"> • Expectant Parents • Research team, Community Medicine Clinic
Healthcare Quality and Safety	<ul style="list-style-type: none"> • Brachytherapy Refresher 	<ul style="list-style-type: none"> • Radiation Therapy Team, Academic Health Center
Ethics	<ul style="list-style-type: none"> • Ethics in Medical Physics 	<ul style="list-style-type: none"> • Residents, Academic Health Center
Health Policy	<ul style="list-style-type: none"> • Risk Evaluation Mitigation Strategies 	<ul style="list-style-type: none"> • Medical Affairs, Pharma
Process Improvement	<ul style="list-style-type: none"> • The Art and Science of Change Management 	<ul style="list-style-type: none"> • Administrators, commercial health services
Emerging Models of Care	<ul style="list-style-type: none"> • Introduction to the PCMH • Introduction to MSSP 	<ul style="list-style-type: none"> • Educators, non-profit healthcare advocacy group • Administrators, commercial health services

CONTINUED ON PAGE 2

In this way JCPH educators-in-training promote the study and application of population health and related disciplines directly to the healthcare workforce. As of spring 2015, these courses have addressed a remarkably broad range of topics in population health.

The topics of study addressed in these courses have tended to fall out into categories representative of the evolving discipline of population health. What does this *de facto* 'curriculum' look like as it is carried out into the workplace by PhD students? Courses produced by PhD students in the past 5 years are outlined in Table 1.

The experience of designing and delivering a hybrid course to authentic audiences develops students' confidence in their ability to construct meaningful, engaging instruction. The following comment selected from a recent course evaluation can be illustrative:

I learned the most about creating a structured course that focuses on learning activities that relate back to the learning objectives[...]. I see myself using the skills of creating learning objectives in the near future for conference presentations. I learned a lot about the value of making work student-centered and tailoring it to your group, which was helpful this week as I gave a presentation to medical students.
[PHS 620, Spring, 2015]

While the full promise of PhDs trained at JCPH will be realized in future years as their research agendas are advanced, these 'scholars-in-training' are already honing instructional skills that offer immediate benefits to themselves and their audiences.

As for PHS 620, the teaching and learning seminar itself, greater attention will be provided going forward to approaches the PhD students can take in addressing the

unique constraints of their course delivery model. While standard courses in the online programs at JCPH run for 14 weeks, courses created by the PhD students run for three weeks. Thus, online technologies that offer the smallest possible learning curves are being explored, as are online learning activities that will engage classes while minimizing the need for complex communication or coordination. More fully adopting existing design principles and practices to the realities of the compressed timeframe of the PhD students' courses will continue to provide stimulating challenges for the course authors and improve learning outcomes for the course participants.

Juan Leon, PhD

*Director of Online Learning
Jefferson College of Population Health
Juan.Leon@Jefferson.edu*