The College of Nursing is proposing revisions to its Master of Healthcare Innovation. These revisions eliminate one of three capstone courses, moving its content into a design thinking course; retitle and renumber HCINNOV 7592 to 7594; and revise HCINNOV 7522 from 2 to 3 credits, placing it earlier in the required course sequence.

The proposal was received by the Graduate School on 5 April 2019. It was reviewed by the combined GS/CAA Curriculum subcommittee, co-chaired by Associate Dean Shari Speer and Faculty Fellow Jennifer Schlueter, on 15 April 2019, approved, and moved forward to the Graduate Council that same day. It was reviewed and unanimously approved by that body on 30 April 2019.
April 5, 2019

Sherri Speer, PhD  
Associate Dean for Academic Affairs  
Jennifer Schlueter, PhD, Faculty Fellow, Curriculum  
The Graduate School  
250 University Hall  
230 North Oval Mall  
Columbus, OH 43210-1336

Dear Dr. Speer and Dr. Schlueter:

Attached is a proposal from the College of Nursing to revise the Master of Healthcare Innovation (MHI) professional (tagged) masters degree program in the College of Nursing.

As described in the attached proposal, this current request for program revision follows a previously-approved program revision in Spring 2018, to more fully optimize the program as follows: 1) eliminate one of the three Capstone courses by moving selected content currently included in HCINNOV 7590 (Capstone 1) into the design thinking course (HCINNOV 7522), 2) retitle and renumber HCINNOV 7591 (revise to Capstone 1; renumber to HCINNOV 7593) and HCINNOV 7592 (revise to Capstone 2; renumber to HCINNOV 7594); and, 3) revise the Fundamentals of Design Thinking in Healthcare course (HCINNOV 7522) from 2 to 3 credits and place it earlier in the required course sequence.

The proposal has been approved through the College of Nursing Graduate Studies Committee and the College of Nursing faculty and has the support of the College of Nursing administration.

Please let me know of any question you may have in regard to this proposal.

Sincerely,

Celia E. Wills, PhD, RN, Associate Professor & College Secretary  
394 Newton Hall  
wills.120@osu.edu

Copy:  
Dr. Cindy Anderson, Associate Dean for Academic Affairs and Educational Innovation  
Dr. Bernadette Melnyk, Dean, College of Nursing  
Dr. Margaret Graham, Vice Dean, College of Nursing  
Dr. Michael Ackerman, MHI Program Director
March 14, 2019

Sherri Speer, PhD
Associate Dean for Academic Affairs
Jennifer Schlueter, PhD, Faculty Fellow, Curriculum
The Graduate School
250 University Hall
230 North Oval Mall
Columbus, OH 43210-1336

Dear Dr. Speer and Dr. Schlueter:

The College of Nursing supports the attached proposal to revise the Master of Healthcare Innovation (MHI) professional (tagged) masters degree program in the College of Nursing.

As described in the attached proposal, this current request for program revision follows a previously-approved program revision in Spring 2018, to more fully optimize the program as follows: 1) eliminate one of the three Capstone courses by moving selected content currently included in HCINNOV 7590 (Capstone 1) into the design thinking course (HCINNOV 7522), 2) retitle and renumber HCINNOV 7591 (revise to Capstone 1; renumber to HCINNOV 7593) and HCINNOV 7592 (revise to Capstone 2; renumber to HCINNOV 7594); and, 3) revise the Fundamentals of Design Thinking in Healthcare course (HCINNOV 7522) from 2 to 3 credits and place it earlier in the required course sequence.

These proposed changes are supported by multiple sources of needs assessment data and have the concurrence of the Department of Design for revision of the Design Thinking in Healthcare course (HCINNOV 7522).

Sincerely,

Cindy Anderson, PhD, RN, APRN-CNP, ANEF, FAHA, FNAP, FAAN
Associate Dean for Academic Affairs and Educational Innovation
Proposal to Revise the College of Nursing
Master of Healthcare Innovation (MHI) Professional Masters Degree Program

February 2019

Background

The fully online Master of Healthcare Innovation (MHI) professional (tagged) masters degree program in the College of Nursing was successfully initiated in January 2017. The MHI program is a rapidly-growing multi-disciplinary leadership degree of 34 total program credits that builds the capacity for students to understand, translate, and lead complex healthcare organizations through the application of innovation and change principles. The program emphasizes evidence-based innovation leadership in relation to operations and policy within complex adaptive healthcare system. The first seven graduates completed the program in Summer 2018, and two additional student cohorts matriculated in Autumn 2017 and Summer 2018, respectively.

Experience with the Spring 2017 inaugural cohort of MHI students provided key insights to inform curriculum enhancements. In Spring 2018, a program revision proposal was approved through the Graduate School and Council on Academic Affairs (CAA) to enhance the MHI program content and delivery. Approved revisions included: 1) suspension of the full-time program option based on lack of applicant interest, 2) adjustments to the program coursework sequencing from three years to six consecutive semesters, 3) minor adjustments to course credits to achieve credit-neutral accommodation of a new 2-credit healthcare design thinking course (HCINNOV 7522), and, 4) revision of the credit distributions of the three-course Capstone Project course series (HCINNOV 7590, 7591, 7592) to achieve 3 fixed credits for each Capstone course. The current sample plan of study shown in Table 1 includes a total 34 program credits.

Table 1. Current Sample Plan of Study for Summer 2018 Cohort (34 credits)¹

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Summer</th>
<th>Autumn</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HCINNOV 7441: Innovation Leadership: Leading from Within (3 credits)</td>
<td>HCINNOV 7440: Innovation in High Performing Organizations (3 credits)</td>
<td>HCINNOV 7590: Capstone 1 (3 credits)</td>
</tr>
<tr>
<td></td>
<td>HCINNOV 7442: Building a Culture of Innovation in Health Systems (3 credits)</td>
<td>HCINNOV 7780: Evidence-based Practice for Innovation in Organizations (3 credits)</td>
<td>HCINNOV 7460: Enhancing Communication in the Innovation System (3 credits)</td>
</tr>
<tr>
<td>Total Credits: 6</td>
<td>Total Credits: 6</td>
<td>Total Credits: 6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Summer</th>
<th>Autumn</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HCINNOV 7521: Best Practices in Organizational Operations (3 credits)</td>
<td>HCINNOV 7591: Capstone 2 (3 credits)</td>
<td>HCINNOV 7592: Capstone 3 (3 credits)</td>
</tr>
<tr>
<td>Total Credits: 6</td>
<td>Total Credits: 7</td>
<td>Total Credits: 3</td>
<td></td>
</tr>
</tbody>
</table>

¹ Note: the MHI program currently admits students once a year in the Summer semester. Table 1 displays the timetable of coursework based on Summer admission. The Autumn 2017 cohort has a transitional curriculum plan that includes elective coursework in place of the HCINNOV 7522 course.
Currently-Proposed Program Revision

The MHI program faculty would like to implement three additional curriculum revisions in 2019 to fully optimize the program. The proposed changes are to: 1) eliminate one of the three Capstone courses by moving selected content currently included in HCINNOV 7590 (Capstone 1) into the design thinking course (HCINNOV 7522), 2) retitle and renumber HCINNOV 7591 (revise to Capstone 1; renumber to HCINNOV 7593) and HCINNOV 7592 (revise to Capstone 2; renumber to HCINNOV 7594); and, 3) revise the Fundamentals of Design Thinking in Healthcare course (HCINNOV 7522) from 2 to 3 credits and place it earlier in the required course sequence. The proposed changes will result in a reduction of the overall program credits from 34 to 32 credits for effective starting with the Summer 2019 cohort. The revised sample plan of study is shown in Table 2 with course changes highlighted in yellow. Brief format syllabi for the revised (HCINNOV 7522) and new (HCINNOV 7593 and HCINNOV 7594) courses are attached.

Table 2. Proposed Sample Plan of Study – Effective Starting with Summer 2019 Cohort (32 credits)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summer</strong></td>
<td><strong>Autumn</strong></td>
</tr>
<tr>
<td>HCINNOV 7441:</td>
<td>HCINNOV 7440:</td>
</tr>
<tr>
<td>Innovation</td>
<td>Innovation in</td>
</tr>
<tr>
<td>Leadership:</td>
<td>High Performing</td>
</tr>
<tr>
<td>Leading from</td>
<td>Organizations</td>
</tr>
<tr>
<td>Within (3 credits)</td>
<td>(3 credits)</td>
</tr>
<tr>
<td>HCINNOV 7442:</td>
<td>HCINNOV 7780:</td>
</tr>
<tr>
<td>Building a</td>
<td>Evidence-based</td>
</tr>
<tr>
<td>Culture of</td>
<td>Practice for</td>
</tr>
<tr>
<td>Innovation in</td>
<td>Innovation in</td>
</tr>
<tr>
<td>Health Systems</td>
<td>Organizations</td>
</tr>
<tr>
<td>(3 credits)</td>
<td>(3 credits)</td>
</tr>
<tr>
<td><strong>Total Credits: 6</strong></td>
<td><strong>Total Credits: 6</strong></td>
</tr>
</tbody>
</table>

**Program Revision Needs Assessment**

Sources of needs assessment data that inform the requested additional program revisions are:

- Ongoing course evaluation feedback from MHI students, faculty, and Capstone project community partners for the Capstone coursework series and design thinking course content
- January 2019 MHI student needs assessment survey on perceptions of preparation for Capstone coursework and aspects of design thinking content in the MHI curriculum
- Similar programs comparison data for number of credits/length of Capstone coursework
- OSU Dept. of Design consultation on enhancing design thinking content in the MHI curriculum

**Student, Faculty, and Community Partner Feedback**

Course evaluation survey data and student/faculty, faculty/faculty, and faculty/community partner discussions in 2018 have resulted in a consensus that 12 months/9 credits for the Capstone course series exceeds what is necessary for the MHI program. A number of MHI Capstone Projects were, or often could be, competed in a shorter time period than 12 months. The nature of innovation in healthcare often means that time-limited
solutions need to be identified, implemented, and evaluated relatively quickly in a flexible, maximally-nimble approach; e.g., such as use of Plan-Do-Study-Act rapid, iterative cycles for healthcare quality improvement initiatives. The current plan of 12 months of Capstone coursework is significantly misaligned with a majority of time-limited Capstone project opportunities students have with their Capstone project community partners. In addition, informal and formal course evaluation feedback from students and faculty supports a need for design thinking content to be introduced earlier in the curriculum in order for students to be fully ready to begin their Capstone coursework. To reconfirm this feedback, in January 2019, currently-enrolled students (n = 74) were surveyed about the extent to which they felt prepared in current curriculum to begin their Capstone coursework. There was a 73% response rate for the survey, and all students felt the Capstone course guidelines were either ‘helpful’ or ‘very helpful,’ and also felt they were adequately prepared to begin their Capstone project. Students were also queried for their views on the importance of human-centered design in healthcare and the potential value of expanding the existing design thinking course (HCINNOV 7522) content to include additional content, including a ‘hands-on’ experiential component in the course. Student survey results strongly supported the proposed plan to enhance the HCINNOV 7522 course content in an expanded 3 credit version of the course. Fifty percent of the students responded that this content was ‘very important’ and another 43% responded it was ‘important.’

Comparison Programs Data for Capstone Requirement

Observations on Capstone coursework from the OSU MHI program are further supported by comparison data for Capstone credits/length of experiences data from four non-OSU online programs that are similar to the MHI program (Table 3). The most similar comparator program is the MHI program offered at Arizona State University. There is a range of 5 to 6 credits of required Capstone coursework that is typically completed within less than one year, for the three comparison programs that include a Capstone requirement.

Table 3. Comparison Programs Capstone Coursework Requirements

<table>
<thead>
<tr>
<th>Institution</th>
<th>Program Title</th>
<th>Capstone Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona State University, AZ</td>
<td>Masters in Healthcare Innovation</td>
<td>5 credit course</td>
</tr>
<tr>
<td>Drexel University PA</td>
<td>MS in Innovation and Entrepreneurship in Advanced Nursing Practice</td>
<td>6 credit hours</td>
</tr>
<tr>
<td>Trevecca Nazarene, TN</td>
<td>Masters in Healthcare and Leadership and Innovation</td>
<td>No Capstone; 3 credit mini-thesis</td>
</tr>
<tr>
<td>Pennsylvania University, PA</td>
<td>Masters in Healthcare Innovation</td>
<td>6 credit hours laboratory experience</td>
</tr>
</tbody>
</table>

OSU Dept. of Design Consultation on Design Thinking Course (HCINNOV 7522)

During Autumn 2018 and early Spring 2019, additional discussions occurred with the OSU Department of Design about potential enhancements to the existing design thinking course (HCINNOV 7522). In addition to the above-described needs assessment data, an additional impetus for revisiting the design thinking content at this time is the increasing recognition in the leadership and innovation literature of the centrality of human-centered design in healthcare innovation, even just over the past 5 years since the original MHI program proposal was initiated by the College of Nursing. The Dept. of Design is fully supportive of expanded content on design thinking in the MHI program (see attached concurrence letter from Dr. Beecher, Chairperson, Dept.

---

of Design) and has agreed to partner with the College of Nursing to co-develop and co-teach an expanded design thinking course. A faculty member from the Dept. of Design (Adam Fromme, B.S.D., M.F.A., Specialization in Aging; Founder and Principal of The Center for Inclusive Aging and Design Research; www.ciadr.com) with expertise in design research and development, including healthcare design, will collaborate with the MHI program faculty to revise and expand the HCINNOV 7522 design thinking course content and learning activities. This partnership will enable the MHI program to offer more in-depth cutting-edge design thinking content to students, on an earlier timing in the program, that will optimize student preparation for commencing the Capstone coursework.

**Curriculum Transition Plan**

The two currently-enrolled cohorts of students (Autumn 2017 and Summer 2018) will continue on their current plans of study and are scheduled to complete their coursework at the end of Spring 2020. With minor differences only, both cohorts are following the same schedule of coursework based on the previously-approved curriculum changes that were enacted starting Spring 2018 (refer to p. 1). Due to transition plans already in process for the previously-approved curriculum revision, there is a single-credit difference between the two cohorts in credits required for each of the first two Capstone courses, HCINNOV 7590 and HCINNOV 7591 (2 vs. 3 credits). The Autumn 2017 cohort curriculum plan includes elective coursework in Spring 2020 in place of the HCINNOV 7522 course to be taken in Autumn 2019 by the Summer 2018 cohort. A course change request to revise HCINNOV 7522 from 2 to 3 credits will be submitted for OAA approval for effective Spring 2020. All future cohorts (matriculation in Summer 2019 and forward) will follow the revised plan of study (Table 2, p. 2).
Prerequisites

Enrollment in the Masters of Healthcare Innovation (MHI) program, or permission of instructor.

Course Description

This course provides a framework and tools for innovation leaders to address challenges within healthcare systems. Principles of design thinking and design principles of functionality, value, and aesthetics are discussed and applied to analysis of complex healthcare problems. The steps involved in the design process will be applied to a Capstone Project.

Objectives

Upon completion of the course, the student will be able to:

1. Discuss the fundamentals of the design process and design thinking methodology.
2. Compare and contrast design thinking techniques, quality improvement methods, and other methods currently used to address healthcare problems.
3. Discuss the evolution of design thinking as applied to healthcare, including how it is similar to and different from other industries.
4. Apply design thinking to a Capstone Project that includes considerations of context and infrastructure in relation to evaluation of outcomes.
5. Identify and advance a Capstone Project using the design process to be carried out in subsequent semesters.

Content Topics

- The Design Process
- Design thinking fundamentals, evolution and theory.
- The role of the innovation leader in utilizing design thinking methodology.
- Design thinking mindsets, skill sets, and tools.
- Creativity, innovation, and design outcomes.
- Case studies of design thinking application in healthcare.
- Application of design thinking to diverse problem areas within an organization.
- Development of microclimates for innovation through design
Prerequisites

Enrollment in the Masters of Healthcare Innovation (MHI) program, completion of HCINNOV 7522, or permission of instructor.

Course Description

First of two Capstone courses in which students begin the implementation of the Capstone Project that was designed in HCINNOV 7522. Emphasis on the implementation plan and individual and team-based experiential learning.

Objectives

1. Compare and contrast the goals, processes, and outcomes of traditional project management and innovation management.
2. Develop the 7 steps of the Business Case for innovation.
3. Develop an implementation strategy for a unique innovation Capstone project.
4. Describe the potential risks of an innovation Capstone project and plans to mediate the risks.
5. Communicate the overall purpose, goals, and value of an innovation Capstone project in an 'elevator speech.'

Content Topics

- Build the business case
- Create Implementation Plan
- Develop Risk Mediation Plan
- Gain approval for Implementation
- Update elevator speech
- Teamwork/ Peer review
Prerequisites

Enrollment in the Masters of Healthcare Innovation (MHI) program, completion of HCINNOV 7593, or permission of instructor.

Course Description

Second of two Capstone courses in which students complete the Capstone Project that was initiated in HCINNOV 7593 (Capstone 1). Emphasis on implementation and evaluation of the Capstone Project and individual and team-based experiential learning.

Objectives

1. Analyze the implementation of a unique innovation Capstone project in a selected setting.
2. Implement an evaluation plan with specific goals, measures and outcomes for an innovation Capstone project.
3. Describe the actual risks of an innovation Capstone project and actions take to mediate the risks.
4. Disseminate a summary of the completed innovation Capstone in a formal presentation, completion of portfolio and preparation of an executive white paper or publication draft.

Content Topics

- Evaluating implementation of the Capstone project
- Evaluating actions of the Risk Mediation Plan
- Evaluating impact of Capstone outcomes on the community of interest
- Updating and presenting the 'elevator speech'
- Teamwork/ Peer review of the Capstone project
4/2/2019

RE: Concurrence for HCINNOV 7522

This memo confirms that the Department of Design supports the delivery of the “Fundamentals of Design Thinking in Healthcare” course (HCINNOV 7522) as part of the Master of Healthcare Innovation (MHI) program in the College of Nursing at The Ohio State University. We have been pleased to have the opportunity to contribute to the development of course content and see this as a very valuable offering for this degree.

Sincerely,

Dr. Mary Anne Beecher, Professor and Chairperson
Department of Design
100 Hayes Hall
108 North Oval Mall
Columbus, OH 43210