ESTABLISHING GRADUATE CERTIFICATES

ARIZONA STATE UNIVERSITY

GRADUATE EDUCATION

This form should be used by programs seeking to establish a new graduate certificate. All sections should be completed.

The graduate certificate is a programmatic or linked series of courses in a single field or in one that crosses disciplinary boundaries. The graduate certificate facilitates professional growth for people who already hold the baccalaureate degree, and it may be freestanding or linked to a degree program. The graduate certificate enables the university to respond to societal needs while promoting university cooperation with corporate, industrial, and professional communities.

Submit the completed and signed (chairs, unit deans) proposal to the **Office of Graduate Academic Programs** in Graduate Education. Mail code: 1003 and electronic copies to eric.wertheimer@asu.edu or amanda.morales-calderon@asu.edu.

Please type.

Contact Name(s): Eve Krahe, Ph.D.	**Contact Phone(s):** 602-496-1804
College: College of Nursing and Health Innovation (CONHI)	
Department/School:	
Name of proposed Certificate: Health Care Innovation	
Requested Effective Term and Year: Fall 2015	

Do Not Fill in this information: <u>Office Use Only</u>
CIP Code:

1. OVERVIEW. Below, please provide a brief overview of the certificate, including the rationale and need for the program, potential size and nature of the target audience, information on comparable programs (at ASU and/or peer institutions), how this program would relate to existing programs at ASU, and any additional appropriate information.

The certificate in Healthcare Innovation is the Healthcare Innovation Programs' response to direct requests from our community partners across the country for a condensed version of the Master of Healthcare Innovation (MHI).

The Master of Healthcare Innovation (MHI) is the only interdisciplinary degree of its kind in the country. The student population spans ages and disciplines. Students vary in levels of expertise, but approximately 80-85% are working professionals and leaders in their organizations.

The MHI student population can be divided into two populations: those looking to breathe new life into their existing position or create a new one they subsequently fill by way of *intrapreneurship*, and those wanting to start their own business, by way of *entrepreneurship*.

Because the majority of MHI students are embedded in organizations, and most of them are leaders within their particular organization, they have the ability to provide feedback to our program and to their leadership teams that result in beneficial iterations to the Healthcare Innovation programs.

The Certificate in Healthcare Innovation is one such iteration. Its creation and design are based on feedback from our graduates, leaders in their organizations. The certificate is different from the Master's degree in that it is looking to provide the MHI content to members of their organization who may already have a master's degree or are looking to acquire knowledge of healthcare innovation along a shorter, more condensed timeline.

The target audience for this certificate is working professionals looking for content expertise in healthcare innovation. Because this certificate is intended for working professionals who are engaged in the healthcare space, the certificate will be offered entirely online.

Potential students may come through existing pipelines that have been created by our master's degree graduates, or they may come from web-based searches or CONHI marketing.

This program will compliment a range of disciplines that sit within the context of healthcare: healthcare practitioners, healthcare architects, insurance providers, policy makers, researchers in anthropology, the humanities, and other social/behavioral disciplines that explore health and healing, healthcare systems designers, healthcare technology

specialists. The certificate will provide students with competency in healthcare innovation in their primary business, academic, or practice role.

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2. ADMINISTRATION AND RESOURCES

A. How will the proposed certificate be administered (including recommendations for admissions, student advisement, retention etc.)? Describe the administering body in detail, especially if the proposed certificate is part of a larger interdisciplinary agenda. How will the graduate support staffing needs for this proposed certificate program be met?

The proposed certificate will be administered under the Healthcare Innovation Programs, under the direction of Eve Krahe, PhD. Dr. Krahe will work with the faculty admissions committee under the same process as MHI admissions. The certificate will follow the same processes and procedures that are provided by the University regarding administering the certificate for admission, advisement, and retention. To meet our current and anticipated needs, we have recruited a part-time academic success specialist whose role may expand to full-time as the program grows.

B. What are the resource implications for the proposed certificate, including projected budget needs? Will new books, library holdings, equipment, laboratory space and/or personnel be required now or in the future? If multiple units/programs will collaborate in offering this certificate, please discuss the resource contribution of each participating program. Letters of support must be included from all academic units that will commit resources to this certificate program.

The proposed certificate will be administered with resources and support already in place for the MHI program. The courses required within the certificate are existing courses in the master's program, and lead faculty are already in place for these courses. Co-instructors will be assigned to each course according to program growth.

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3. ADMISSIONS PROCEDURES AND CRITERIA

The admissions procedures and criteria for the Innovation Leadership Certificate are the same as Graduate Education.

A. **Admission criteria** – Applicants must meet the admissions criteria for Graduate Education. Please also include any other additional admission requirements, e.g. type of undergraduate degree, minimum GPA, tests and/or entry-level skills that are required for this certificate program. (http://graduate.asu.edu/sites/default/files/GraduatePolicies_1.pdf)

Degree(s): Bachelor's degree in any health-related business, social science, hard science, healthcare practice, or technology field

GPA: Minimum of a 3.00 cumulative GPA (scale is 4.0=A) in the last 60 hours of a student's first bachelor's degree program. Minimum of 3.00 cumulative GPA (scale is 4.0 = A) in the applicable Master's degree.

English Proficiency Requirement for International Applicants: (See Graduate Education policies and procedures) (http://graduate.asu.edu/admissions/international/english_proficiency):

Same as Graduate Education.

Required Admission Examinations: ☐GRE   ☐GMAT   ☐Millers Analogies   ☒ None required

B. **Application Review Terms**

Indicate all terms for which applications for admissions are accepted and the corresponding application

deadline dates**, if any:

*The Certificate in Healthcare Innovation will have five starts in accordance with HCI policy: Fall A, Fall B, Spring A, Spring B, and Summer C.

*Each of these starts has a deadline date of two weeks prior to the start of classes, per the Healthcare Innovation Programs' policy.

⊠ Fall   Deadline (month/year):

Fall A: July 6, 2015 (application)

      July 13, 2015 (materials)

Fall B: September 7, 2015 (application)

      September 15, 2015 (materials)

⊠ Spring   Deadline (month/year):

Spring A: November, 2015

Spring B: April, 2016

⊠ Summer   Deadline (month/year):

Summer C: May, 2015

C. Projected annual admission/enrollment

How many students will be admitted immediately following final approval of the certificate? What are enrollment projections for the next three years?

Upon final approval of the certificate, it is anticipated that for Fall A 2015, 5-10 students will be admitted immediately. Enrollment projections for the following three years () are:

2015-2016: 30

2016-2017: 60

2017-2018: 110

4. ACADEMIC REQUIREMENTS

A. Minimum credit hours required for certificate (15 credit hour minimum)

15 credit hours

B. Please describe the primary course delivery mode, (e.g., online, face-to-face, off-site etc.). Please note: If this proposed initiative will be offered <u>completely</u> online, clearly state that in this section.

This certificate will be offered completely online

C. As applicable, please describe culminating experience required (e.g., internship, project, research paper, capstone course, etc.)

The culminating experience is a capstone project.

HCI 570 Course Description:

The Innovation Proposal applies concepts learned and operationalizes skills acquired throughout the Healthcare Innovation certificate. Students will envision emerging paths toward an outcome by first presenting a problem they have identified within a healthcare organization, and creating collaborative relationships and developing strategies to initiate change in their chosen setting.

Students' knowledge of innovation principles will be demonstrated in utilizing the innovation process and strategies will be put forth for implementation of the proposed changes.

Learning Outcomes:

1. Design an innovative proposal that synthesizes concepts learned in the Healthcare Innovation certificate
2. Demonstrate the capacity to lead and facilitate innovation in organizations.

D. What knowledge, competencies, and skills (learning outcomes) should graduates have when they complete this proposed certificate program? Examples of program learning outcomes can be found at (https://uoeee.asu.edu/program-outcomes).

1. Formulate an innovative healthcare proposal, critically appraise existing processes of the diffusion of innovations in complex systems, search for the best evidence specific to an innovation, and make recommendations to facilitate effective diffusion and adoption of innovations and evaluate the feasibility of the idea.

2. Design a plan for dissemination of information specific to innovation and: a) policy making, b) financing, or c) outcomes measurement,

3. Utilize skills in designing, implementing, and evaluating innovative projects / processes.

4. Demonstrate mastery of the ability to lead the transformation of traditional organizational cultures into a culture of innovation.

E. How will students be assessed and evaluated in achieving the knowledge, competencies, and skills outlined in 4.D. above? Examples of assessment methods can be found at (http://www.asu.edu/oue/assessment.html).

The graduate certificate completion outcomes are leveled in accordance with the MHI completion outcomes.

Program Completion Outcome # 1
Formulate an innovative healthcare proposal by critically appraising existing processes of the diffusion of innovations in complex systems, searching for the best evidence specific to an innovation, and making recommendations to facilitate adoption of innovations and evaluate the feasibility of the idea.

Measure:
MHI 554 "Outcomes Evaluation Project": includes the design of an innovative project, an implementation and diffusion plan, and the creation of an evaluation/measurement plan for the innovative project and processes of diffusion/implementation.

Criterion:
80% of student contributions will "meet or exceed expectations" using standardized grading rubrics on this assignment

Program Completion Outcome # 2
Design a plan for dissemination of information specific to innovation and a) policy making, b) financing c) outcomes measurement and/or d) the media

Measure: Upon program completion, 80% of graduates will develop change programs that have a sustainable vision and value for healthcare innovation.

Criterion: Evidence of the sustainability of the Capstone reflected in post-graduation surveys at 6 months and one year post-graduation.

Program Completion Objective #3
Utilize skills in designing, implementing, and evaluating innovative projects/processes

Measure: Demonstrated ability to challenge assumptions, long-held mental models, utilizing differing values and beliefs using Discussion Board on Blackboard and feedback processes on individual assignments.

Criterion: 90% of students will master these abilities according to existing MHI program rubrics that assess affective competencies.

Program Completion Objective #4
Demonstrate mastery of the ability to lead the transformation of traditional organizational cultures into a culture of innovation.

Measure: 80% of graduates will use team processes and the tools of innovation to facilitate multidisciplinary team idea generation and classification of healthcare innovation needs.

Criterion: Evidence of graduates' ability to anticipate and identify healthcare innovation needs and facilitation of innovative team processes as reflected in post-graduation surveys at 6 months and one year post-graduation.

F. Please state the satisfactory student academic progress standards and guidelines (including any time limits for completion).

Students will fulfill Graduate Education satisfactory academic progress standard of completing the certificate program courses with a GPA of 3.0 and all coursework completed within 6 years. If students do not meet the GPA or time limit policy requirements, they will be recommended for dismissal from the certificate program.

G. Will this proposed certificate program allow sharing of credit hours from another ASU degree program to be used as part of this certificate program?

Yes, this program shares four courses with the MHI degree. These courses are: HCI 538, *Innovation and the individual*, HCI 561, *Innovation Methods*, HCI 542, *Systems Thinking in a Complex Environment,* and MHI 554 Healthcare *Outcomes Evaluation.*

H. Below, please list all required and elective courses in the appropriate boxes (you may attach additional pages if necessary).

Please ensure that all *new core* course proposals have been submitted to the Provost's office through the Curriculum ChangeMaker online course proposal submission system before this initiative is put on the University Graduate Council and CAPC agendas. Please note: a minimum of 2/3 of the courses required for a graduate certificate must be at the 500-level or above.

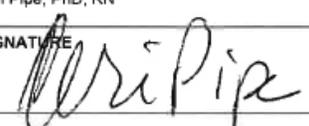| Required Courses			Credit Hours
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total) **12**
HCI 538	*Innovation and the Individual*	no	**3**
HCI 561	*Innovation Methods*	no	**3**
HCI 542	*Systems Thinking in a Complex Environment*	no	**3**
HCI 554	*Outcomes Evaluation*	no	**3**
Electives			Credit Hours
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total)
	not applicable		
Culminating Experience (if applicable)			Credit Hours (Insert Section Sub-total) **3**

HCI 570 Capstone Course: Innovation Project	3
Total required credit hours	**15**

5. PRIMARY FACULTY PARTICIPANTS - Please list all primary faculty participants for the proposed certificate, including home unit and title. You may attach additional pages if necessary.

Name	Home Unit	Title
Eve Krahe, PhD	Healthcare Innovation Programs	Director, Healthcare Innovation Programs/Assistant Professor
Cathy Lalley, PhD, MHI, RN	Healthcare Innovation Programs	Assistant Professor
Sonja Nelson, MHI, BSHA	Healthcare Innovation Programs	Course Lead, MHI561/faculty associate
Linda Voyles, MHI, BSN, RN, CNOR	Healthcare Innovation Programs	Course Lead, MHI554/instructor

6. REQUIRED SUPPORTING DOCUMENTS
(Please label accordingly, i.e., Appendix or Attachment A, B, etc.)

Please include the following with your proposal:

   A. Sample plans of study for students in the proposed program – See Appendix II

   B. Statements of support from all deans and heads of impacted academic units – See Appendix III

7. APPROVALS - If the proposal submission involves multiple units, please include letters of support from those units.

DEPARTMENT CHAIR or SCHOOL DIRECTOR (PRINT/TYPE)

Brenda Morris, EdD, RN, CNE

SIGNATURE	DATE
Brenda Morris	9/10/2014

DEAN (PRINT/TYPE)

Teri Pipe, PhD, RN

SIGNATURE	DATE
Teri Pipe	9/10/2014

The following section will be completed by Graduate Education following the recommendations of faculty governance bodies.

VICE PROVOST FOR GRADUATE EDUCATION	
SIGNATURE	**DATE**

Please note: Proposals for new certificates also require the review and recommendation of approval from the University Graduate Council, Curriculum and Academic Programs Committee (CAPC), the Academic Senate, and the Office of the Provost before they can be put into operation.

The final approval notification will come from the Office of the Provost.
GF1112G-89

APPENDIX I

OPERATIONAL INFORMATION FOR GRADUATE CERTIFICATES

(This information is used to populate the Graduate Programs Search website.)

1. **Provide a brief** (catalog type - no more than 150 words) **program description.**

   The healthcare innovation graduate certificate provides students with the cognitive and affective competencies to create and sustain transformative change in healthcare. The emerging field of healthcare innovation requires individuals who can lead and facilitate change. Students will learn through reflection, personality assessment, exercises in interdisciplinary team-case study analyses, system intervention, idea pitching, and change-readiness assessment. Related entrepreneurial and intrapreneurial concepts such as prototyping, business plan/project plan design, budgeting and presentation skills are also covered in the program. Emphasizing complexity leadership and vulnerability along with emotional competence, this certificate will prepare students to work in this interdisciplinary and highly sought-after area.

2. Campus(es) where program will be offered: *

☐	Downtown	☐	Tempe
☒	Online (only)	☐	West
☐	Polytechnic		

   * To select desired box, place cursor on the left side of the box, right click mouse, select *Properties*, under *Default Value* select *Checked*, press *OK* and the desired box will be checked

3. **Keywords:** (List all keywords that could be used to search for this program. Keywords should be specific to the proposed program.)

   Innovation, healthcare, teamwork, complexity, entrepreneur, intrapreneur, business, research

4. **Area(s) of Interest:**

   * To select desired box, place cursor on the left side of the box, right click mouse, select *Properties*, under *Default Value* select *Checked*, press *OK* and the desired box will be checked

   A. Select one (1) primary area of interest from the list below that applies to this program.

   - ☐ **Architecture & Construction**
   - ☐ **Arts**
   - ☐ **Business**
   - ☐ **Communications & Media**
   - ☐ **Education & Teaching**
   - ☐ **Engineering & Technology**
   - ☐ **Entrepreneurship**
   - ☒ **Health & Wellness**
   - ☐ **Humanities**
   - ☐ **Interdisciplinary Studies**
   - ☐ **Law & Justice**
   - ☐ **Mathematics**
   - ☐ **Psychology**
   - ☐ **STEM**
   - ☐ **Science**
   - ☐ **Social and Behavioral Sciences**
   - ☐ **Sustainability**

   B. Select one (1) secondary area of interest from the list below that applies to this program.

   - ☐ **Architecture & Construction**

☐ **Arts**
☒ **Business**
☐ **Communications & Media**
☐ **Education & Teaching**
☐ **Engineering & Technology**
☐ **Entrepreneurship**
☐ **Health & Wellness**
☐ **Humanities**
☐ **Interdisciplinary Studies**
☐ **Law & Justice**
☐ **Mathematics**
☐ **Psychology**
☐ **STEM**
☐ **Science**
☐ **Social and Behavioral Sciences**
☐ **Sustainability**

Plan of Study

Healthcare Innovation Programs

Course Progression: Graduate Certificate in Healthcare Innovation

 Certificate runs on a "carousel" model. Hard-start course (course that is required for beginning the program) is MHI 538 and hard-stop course (course that is required at completion of the program) is HCI 570. Remaining courses cycle through according to scheduled offering, which does not have a set order.

Full-time students will take two courses per session (7.5 weeks) and part-time students will take one course per session (7.5 weeks).

Plan of Study: Healthcare Innovation Certificate

HCI 538 Innovation and the Individual	(hard start)	3 credits
HCI 561Innovation Methods	(hard start)	3 credits
HCI 542 Systems Thinking in a Complex Environment		3 credits
HCI 554 Outcomes Evaluation		3 credits
HCI 570 Capstone Course: Innovation Project	(hard stop)	3 credits
Total Credits		**15 credits**

From: Alfredo Artiles

Sent: Monday, October 20, 2014 2:41 PM

To: J.A. Eve Krahe

Cc: Alfredo Artiles

Subject: Re: Graduate certificates, Healthcare Innovation and Innovation leadership

Hi Eve,

I've checked with my colleagues in the college and we support these proposals.
best

Alfredo

Alfredo J. Artiles, Ph.D.
Associate Dean of Academic Affairs
Ryan C. Harris Memorial Endowed Professor of Special Education
Mary Lou Fulton Teachers College
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http://education.asu.edu/faculty/view/alfredo-artiles
p: 480.965.6178
f: 480.965.4849

http://www.equityallianceatasu.org/

RE: healthcare innovation grad certificates

J.A. Eve Krahe

Sent: Monday, October 20, 2014 10:55 AM
To: Stacey Whitecotton

Hi Stacey

Thank you for taking a look.

Reagarding the MBA students joining us, that would be fantastic! I'd love to explore possible synergies with you.

We're hoping for a FA 2015 roll-out. I'll keep you posted.

Eve

J.A. Eve Krahe, PhD
Director, Healthcare Innovation Programs
Coordinator, Master of Healthcare Innovation China Initiative
College of Nursing & Health Innovation
Arizona State University
602-496-1804 office | 814-580-6541 mobile
eve.krahe@asu.edu

From: Stacey Whitecotton
Sent: Monday, October 20, 2014 10:52 AM
To: J.A. Eve Krahe
Cc: Shawnna Pomeroy
Subject: RE: healthcare innovation grad certificates

Hello Eve,

The W. P. Carey School of Business has no concerns about the proposed Graduate Certificate in Healthcare Innovation or the Graduate Certificate in Innovation Leadership.

I would also like to talk to you about the possibility of our MBA students taking courses from these certificates as part of their program of study.

Thanks, Stacey

Stacey Whitecotton
Arizona State University | W. P. Carey School of Business
Sr. Associate Dean – Graduate Programs
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wpcarey.asu.edu | knowwpcarey.com