



**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): Kristen K. Will	Contact Phone(s): 602-496-0808
College: College of Health Solutions	
Department/School: School for the Science of Health Care Delivery	
Name of proposed Certificate: Science of Health Care Delivery	
Requested Effective Term and Year: Fall 2016 (e.g. Fall 2014)	
Do Not Fill in this information: Office Use Only	
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.

This certificate will draw from existing courses offered in the online MS in the Science of Healthcare Delivery and the online MAS in Health Informatics. Change in the healthcare system has accelerated in the past five years and will continue to do so as the healthcare system transforms itself from one based on volume to one based on value. Our conversations with pharmaceutical companies and with healthcare delivery systems seeking to attract and keep medical residents and fellows tell us that there is a pressing need for anyone involved in the healthcare system to better understand the dynamics at play and how they can be effective in doing their work even as the environment continues to change, sometimes in unanticipated ways. We believe this is a small, but representative sample and that a wide array of professionals who deal with the healthcare system will want to be more understanding of their clients while not needing a further degree -- attorneys and accountants are two additional examples.

The certificate program addresses the current and future needs of the health and health care workforce – including, but not limited to corporate-suite healthcare executives and administrators, health care providers (physicians, physician assistants, nurse practitioners, nurses), front line staff (respiratory therapists, occupational therapists, physical therapists, dietitians, speech pathologists, audiologists), and students in the health-related disciplines.

This certificate is also appealing for students with undergraduate degrees who desire to enter into the healthcare field and may not possess a competitive GPA to matriculate into a traditional graduate degree. It also presents additional options for entry points for qualified students into the healthcare field.

By being able to offer this certificate through ASU Online we can attract a national audience to this certificate and enhance its chances of success through providing three distinct, attractive, and equally valuable alternatives to applicants:

- 8 core credits in Science of Health Care Delivery with further 7 credits in one of the following tracks:
 - Quality and Process Improvement
 - Clinical Informatics

- Leadership

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 admission process, recruitment and retention will all be handled through the processes already established for the handling of students in the MS in the Science of Healthcare Delivery. If the program becomes very successful it may warrant its own support staff. Course content will be delivered by the same faculty as in the MS Science of Health Care Delivery and the MAS in Health Informatics, with the possibility of transferring some of the credit hours into a master's program with Graduate Education approval.

- 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 courses required by the proposed certificate are already being offered by the various programs from which they will be drawn. All issues related to student performance will be handled by Science of Healthcare Delivery staff. In the case of certificate success, additional section(s) may be required and staffed by faculty associates under the direction of the lead course faculty. The certificate will be delivered through ASU Online.

3. ADMISSIONS PROCEDURES AND CRITERIA

- 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): All students with a bachelor's degree from a regionally accredited College or University will be considered, though the following disciplines are preferred: general science (biology, physiology), health-related field (nursing, health policy, public health), business or law (healthcare / business administration, economics, finance, law), math or computer science (statistics, computer science), engineering (biomedical engineering), or a health-related field.

All applicants must have basic competencies in college-level math, general biology (or physiology), statistics. Course equivalencies include: HCD 300 Biostatistics, BIO181 General Biology I, BIO 182 General Biology II, MAT 117 College Algebra, or other coursework with approval of the academic unit.

Work Experience: 2+ years of work experience in a health-related field preferred.

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 an 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 requirement.

Required Admission Examinations: GRE GMAT Millers Analogies None required

- B. Application Review Terms** - Indicate all terms for which applications for admissions are accepted:

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

Fall (year): 2016

Spring (year): 2017

Summer (year): 2017

- 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?*

We project 20 students in the first cohort, fall 2016. Through marketing strategies and strategic partnerships, we project a total of 50 students in 2016-17, 100 in 2017-18, and 200 in 2018-19

4. ACADEMIC REQUIREMENTS

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

15

- 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 completely online, clearly state that in this section.**

Completely online (ASU online)

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

Not applicable

- 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>).**

Graduates will:

- Gain a thorough understanding of key concepts in health care process and system design, and will be able to apply these concepts to drive health care quality improvement at the local, national, and global levels.
- Acquire leadership skills necessary to manage change in complex healthcare systems and lead patient centered teams in order to improve health, health care systems and processes.
- Compare the contributions of continuous quality improvement (CQI), health care finance, health economics, health law, management and leadership, and process engineering in the current delivery system.
- Critically assess the Science of Health Care Delivery to distinguish from other industries
- Apply biostatistical concepts for interpretation of large data sets in healthcare organizations.
- Use the logic of economics to analyze the problems facing health care delivery in the United States and hopefully to transfer the logics to a wider range of questions.
- Synthesize the action steps of an innovation model integrating these into healthcare concepts.
- Correlate process improvement method (Lean, Six Sigma, and Model for Improvement) to the performance problem.
- Discuss specific applications of health informatics as they apply to the delivery of healthcare.
- Develop the connection between information technology, computer-based clinical decision support and evidence-based medicine.

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 majority of the curriculum will be case-study based and students will be expected to work in teams to produce a written report or presentation that identifies and proposes a comprehensive solution to a health care problem. Specifically, competencies will be exhibited through the following metrics:

Program Completion Outcome	Course	Measure	Performance Criterion
1. Gain a thorough understanding of key concepts in health care process and system design, and will be able to apply these concepts to drive health care quality improvement at the local, national, and global levels.	HCD 502 Healthcare Systems and Design	Research Paper – Healthcare systems and system design	80% of students will earn a B or better on the assignment.
		Discussion Board – concepts in system design and healthcare systems	80% of students will earn a B or better on the assignment.
		Group Case Studies-Root cause analysis with process engineering to improve process in healthcare systems	80% of students will earn a B or better on the assignment.
2. Apply biostatistical concepts for interpretation of large data sets in healthcare organizations.	HCD 501 Health Behavior and Statistical Tools in Healthcare Environments	Final Exam- Mastery of Key Concepts in Biostatistics	At least 80% of the students will earn an aggregate (mean score) rating of at least "mastery" on the final exam using a 5-point scale where: 1=failing 2=unsatisfactory 3=adequate 4=mastery 5=superior.
		CITI Training-Ethics in Research	100% of students will successfully complete the CITI (Collaborative Institutional Training Initiative)
3. Acquire leadership skills necessary to manage change in complex healthcare systems and lead patient-centered care groups in healthcare.	HCD 594 Conference and Workshop Topic: Leadership and Professionalism	Literature Review-Leadership in Healthcare	80% of students will earn a B or better on the assignment.
		Discussion Board-Qualities of a Leader in Healthcare	80% of students receive a satisfactory rating.
		Midterm Case Studies Assignment	75% of students will earn a B or better on the assignment.
4. Compare the contributions of continuous quality improvement (CQI), health care finance, health economics, health law, management and leadership, and process engineering in the current delivery system.	HCD 598 Healthcare Finance and Process Engineering	Literature Review	80% of students will earn a B or better on the assignment.
		Discussion Board – Healthcare quality improvement and process improvement concepts	90% of students will earn a B or better on the assignment.
		Final Exam	80% of students will earn a B or better on the

			assignment.
5. Critically assess the Science of Health Care Delivery to distinguish from other industries	HCD 540 Seminar in Science of Health Care Delivery	Literature Review	80% of students will earn a B or better on the assignment.
		Discussion Board – Analysis of the current healthcare system and comparison to other industries	90% of students will earn a B or better on the assignment.
6. Use the logic of economics to analyze the problems facing health care delivery in the United States and hopefully to transfer the logics to a wider range of questions.	HCD 511 Health Economics, Policy, and Payment Models	Research Paper – Healthcare Policy and economics concepts	80% of students will earn a B or better on the assignment.
		Discussion Board – Payment models in healthcare	80% of students will earn a B or better on the assignment.
		Final Exam	80% of students will earn a B or better on the assignment.
7. Synthesize the action steps of an innovation model integrating these into healthcare concepts.	HCD 591 Seminar Topic: Creativity and Innovation Leadership in Health	Research Paper – Innovation in Healthcare	80% of students will earn a B or better on the assignment.
		Discussion Board – Creativity in Healthcare	80% of students will earn a B or better on the assignment.
		Reflection Assignment	80% of students will earn a B or better on the assignment.
8. Correlate process improvement method (Lean, Six Sigma, and Model for Improvement) to the performance problem.	HCD 532 Health Care Management	Final Paper- Concepts in Healthcare Management	80% of students will earn a B or better on the assignment.
		Discussion Board – Healthcare Management Concepts	80% of students will earn a B or better on the assignment.
		Lean Six Sigma Green Belt Certification	80% of students will earn a B or better and successfully earn a green belt certification.
9. Discuss specific applications of health informatics as they apply to the delivery of healthcare	BMI 601 Fundamentals of Health Informatics	Final Exam- Mastery of Key Concepts in Informatics	At least 75% of the students will earn an aggregate (mean score) rating of at least "mastery" on the final exam using a 5-point scale where: 1=failing 2=unsatisfactory 3=adequate 4=mastery 5=superior.
		Discussion Board – Healthcare Informatics	80% of students will earn a B or better on the assignment.

10. Develop the connection between information technology, computer-based clinical decision support and evidence-based medicine.	BMI 616 Clinical Decision Support and Evidence-Based Medicine	Final Exam- Mastery of Key Concepts in Clinical Decision Support	At least 75% of the students will earn an aggregate (mean score) rating of at least "mastery" on the final exam using a 5-point scale where: 1=failing 2=unsatisfactory 3=adequate 4=mastery 5=superior.
		Discussion Board – Clinical Decision Support	80% of students will earn a B or better on the assignment.

In addition to the above expected outcomes, performance measures and criteria, indirect measures will include course evaluations and exit interviews. Additionally, the job placement of students will also be assessed to evaluate the efficacy and validity of the course content and certificate as whole.

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

The certificate may be completed in 18-24 months. All coursework used to complete an ASU graduate certificate must be completed within a six year time limit. Students must abide by all policies set forth by Graduate Education and the College of Health Solutions. In addition, they must maintain a 3.0 GPA to remain in good standing. Students must complete the certificate program within six years. Students who are deemed unsatisfactory may be recommended to Graduate Education 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? (Please note that a maximum of 12 graduate-level credit hours taken as a non-degree student at ASU, including as a part of a certificate program, may be used towards a future graduate degree at ASU).

Yes. The certificate allows the sharing of hours based on Graduate Education policy.

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.

Students are required to select one of the following tracks:

- **Quality and Process Improvement**
- **Clinical Informatics**
- **Leadership**

<u>Required Core</u>			<u>Credit Hours</u>
<i>(Prefix & Number)</i>	<i>(Course Title)</i>	<i>(New Course?) Yes or No?</i>	<i>(Insert Section Sub-total)</i>
HCD 540	Seminar in Science of Health Care Delivery	N	2
HCD 502	Healthcare Systems and Design	N	3
			8

HCD 511	Health Economics, Policy, and Payment Models	N	3
TRACKS (Students are required to select one of the tracks below for 7 credit hours)			Credit Hours (Insert Section Sub-total)
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	7
QUALITY AND PROCESS IMPROVEMENT TRACK COURSEWORK			
HCD 501	Health Behavior and Statistical Tools in Healthcare Environments	N	4
HCD 598	Healthcare Finance and Process Engineering	N	2
HCD 594	Conference and Workshop Topic: Leadership and Professionalism	N	1
CLINICAL INFORMATICS TRACK COURSEWORK			
BMI 601	Fundamentals of Health Informatics	N	3
BMI 616	Clinical Decision Support and Evidence-Based Medicine	N	3
HCD 594	Conference and Workshop Topic: Leadership and Professionalism	N	1
LEADERSHIP TRACK COURSEWORK			
HCD 532	Health Care Management	N	2
HCD 598	Special Topics: Healthcare Finance and Process Engineering	N	2
HCD 594	Leading Change in Health Organizational Systems	N	1
HCD 594	Conference and Workshop Topic: Leadership and Professionalism	N	1
HCD 591	Seminar Topic: Creativity and Innovation Leadership in Health	N	1
Total required credit hours			15

Note: Omnibus number track courses will be submitted to the University for permanent numbers. The unit will submit a program changes form to Graduate Education to update the curriculum once the permanent numbers have been established.

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
Victor Trastek	SHCD	Professor of Practice
Natalia Wilson	SHCD	Associate Director
Alison Essary	SHCD	Clinical Associate Professor
Benedicte Callan	SHCD	Clinical Professor
Denis Cortese	SHCD, HCDPP	Professor
Jack Gilbert	CHS/CONHI	Clinical Professor
Mac McCullough	SHCD	Asst. Professor
Ellen Green	SHCD	Asst. Professor

David Kaufman	BMI	Associate Professor
Adela Grando	BMI	Assistant Professor
Robert Greenes	BMI	Professor
George Runger, PhD	BMI	Professor, Chair


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)	
SIGNATURE	DATE

DEAN (PRINT/TYPE) Julie Liss	
SIGNATURE 	DATE 8/27/15

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

DEAN OF 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.

Change in the healthcare system has accelerated in the past five years and will continue to do so as the healthcare system transforms itself from one based on volume to one based on value. The Science of Health Care Delivery certificate program addresses the current and future needs of the health and health care workforce – including, but not limited to C-suite executives and administrators, health care providers (physicians, physician assistants, nurse practitioners, nurses), front line staff (respiratory therapists, occupational therapists, physical therapists, dietitians), and students in the health-related disciplines.

Breakdown of requirements for the academic catalog:

Core (8)

HCD 540 Seminar in Science of Health Care Delivery (2)

HCD 502 Healthcare Systems and Design (3)

HCD 511 Health Economics, Policy, and Payment Models (3)

Tracks (7)*

*Students are required to select one of the tracks below for 7 credit hours

Quality and Process Improvement

Clinical Informatics

Leadership

2. Contact and Support Information:

Office Location (Building & Room): SHCD Health North	Campus mail code: 9020
Campus Telephone Number: 602.496.0868	Program Director (Name and *ASU ID): Victor Trastek, MD (vtrastek)
Program email address: shcd@asu.edu	Program Support Staff (Name and *ASU ID): Kelli Kreger (kkreger)
Program website address: https://chs.asu.edu/shcd	Admissions Contact (Name and *ASU ID): Nathaniel Wade (nlwade)

* ASU ID (e.g. SHJONES)

3. Application and iPOS Recommendations: List the Faculty and Staff that will input admission/POS recommendations to Gportal **and** indicate their approval for Admissions and/or POS:

Name	ADMSN	POS
Nate Wade (interim graduate advisor)	X	X

4. 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

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

Health, Healthcare, delivery, science, business, informatics, technology, leadership, systems, medical, administration, quality, process improvement, clinical

6. **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](#)

APPENDIX II

Curriculum Map and Plan of Study for Graduate Certificate, Science of Health Care Delivery

Track	Fall A 2016	Fall B 2016	Spring A 2017	Spring B 2017	Summer A 2017	Summer B 2017
Quality Improvement/ Process Engineering	<p>HCD 502 Healthcare Systems and Design (3)</p> <p>HCD 594 Conference and Workshop Topic: Leadership and Professionalism (1)</p>	<p>HCD 540 Seminar in Science of Health Care Delivery (2)</p>	<p>HCD 598 Healthcare Finance and Process Engineering (2)</p>	<p>HCD 511 Health Economics, Policy, and Payment Models (3)</p>		<p>HCD 501 Health Behavior and Statistical Tools in Healthcare Environments (4)</p>
Clinical Informatics	<p>HCD 502 Healthcare Systems and Design (3)</p> <p>HCD 594 Conference and Workshop Topic: Leadership and Professionalism (1)</p>	<p>HCD 540 Seminar in Science of Health Care Delivery (2)</p> <p>BMI 616 Clinical Decision Support and Evidence-Based Medicine (3)</p>	<p>BMI 601 Fundamentals of Health Informatics (3)</p>	<p>HCD 511 Health Economics, Policy, and Payment Models (3)</p>		
Leadership	<p>HCD 502 Healthcare Systems and Design (3)</p> <p>HCD 594 Leading Change in Health Organizational Systems (1)</p>	<p>HCD 540 Seminar in Science of Health Care Delivery (2)</p> <p>HCD 594 Conference and Workshop Topic: Leadership and Professionalism (1)</p>	<p>HCD 598 Special Topics: Healthcare Finance and Process Engineering (2)</p>	<p>HCD 511 Health Economics, Policy, and Payment Models (3)</p>	<p>HCD 532 Health Care Management (2)</p> <p>HCD 591 Seminar Topic: Creativity and Innovation Leadership in Health (1)</p>	

APPENDIX III

Support Statements

College of Health Solutions – Official Submission

From: Kate Lehman
Sent: Friday, August 28, 2015 2:16 PM
To: Curriculum Planning
Subject: FW: Attached Image

Attached is a proposal to establish a graduate certificate in the Science of Health Care Delivery (SHCD) concurrent with the submission of the request in the Academic Plan.

Thank you,



550 North 3rd Street, Ste. 511 | Phoenix, AZ 85004-3020

Work: 602.496.0241 | Fax: 602.496.0544 | Kate.Lehman@asu.edu

<https://chs.asu.edu>

ASU Online – Support Memo



To: Kristen Will, Director of Executive Education, College of Health Solutions
From: Casey Evans, Program Manager, Online Program Launch and Support
Date: February 11, 2016
Subject: Program Support Memo

Dear Kristen,

Congratulations!

The program, Graduate Certificate, Science of Health Care Delivery, has received support from Dean Phil Regier to be offered through ASU Online. This program must complete university governance reviews for formal approval. Please include this support memo along with your proposal submission when it is submitted formally to the university (to curriculumplanning@asu.edu) by your dean or their designee.

Please note that in order to proceed with implementation, final approval must be supplied by the university provost.

Once again, congratulations! We are excited to work with you on your new program.
Thank you!

Casey Evans
Program Manager, Online Program Launch and Support
EdPlus at ASU
Arizona State University
Phone: (480) 884-1631
Casey.l.evans@asu.edu



February 10, 2016

Kristen K. Will, MHPE, PA-C
Director of Executive Education
College of Health Solutions
School for the Science of Health Care Delivery

Dear Ms. Will:

On behalf of the Department of Biomedical Informatics in the College of Health Solutions, I have reviewed the proposal provided for a new Graduate Certificate in the Science of Health Care Delivery. We support the approval of this proposal and the enrollment of students in this certificate plan into the BMI courses listed.

Sincerely,

A handwritten signature in black ink, appearing to read "George Runger".

George Runger, PhD
Chair, Department of Biomedical Informatics

Ira A. Fulton Schools of Engineering – Support Letter

From: [Jeremy Helm](#)
To: [Kristen Will](#)
Cc: [James Collofello](#)
Subject: RE: Support Memo for Graduate Certificate Program
Date: Friday, February 05, 2016 3:52:39 PM

Hi Kristen,

The Fulton Schools of Engineering have no concerns or objections regarding the proposed Science of Health Care Delivery graduate certificate in the College of Health Solutions. We support this proposal and wish you the best of luck for a successful implementation.

Jeremy Helm

Director, Academic Administration & Student Success
Ira A. Fulton Schools of Engineering
Arizona State University
Tempe, AZ 85287-8109
(480) 965-8931 voice
(480) 965-8095 fax

From: Kristen Will
Sent: Thursday, February 04, 2016 10:35 AM
To: Jeremy Helm <JEREMY.HELM@asu.edu>
Subject: Support Memo for Graduate Certificate Program

Dear Jeremy,

Hello! I am a new faculty member in the School for the Science of Health Care Delivery and Director of Executive Education for College of Health Solutions. We are developing a new graduate certificate program in the Science of Health Care Delivery program. To move the approval process forward, I would like to request a support memo from Fulton School of Engineering. This memo verifies that this certificate program has no significant impact on the course offerings in your college. I have attached the application for your review. Essentially, this certificate is 15 credits of the established 30 credit MS Science of Health Care Delivery program already in existence. Thank you for submitting this support memo directly by to me by **Feb. 12th, 2016**. I truly appreciate your support! If you have any questions, please let me know. Thank you!

Kindest Regards,

Kristen

Kristen K. Will, MHPE, PA-C
Director of Executive Education,



February 10, 2016

Kristen K. Will, MHPE, PA-C
Director of Executive Education,
College of Health Solutions
Clinical Assistant Professor,
School for the Science of Health Care Delivery

Dear Ms. Will:

Thank you for contacting me regarding a new proposed graduate certificate in the College of Health Solutions. I have reviewed the proposed Graduate Certificate in the Science of Health Care Delivery. This certificate does not pose a conflict with current offerings in the College of Nursing and Health Innovation. On behalf of the College of Nursing and Health Innovation I am pleased to provide full support for the proposed certificate.

Sincerely,

A handwritten signature in cursive script that reads "Katherine Kenny".

Katherine Kenny, DNP, RN, ANP-BC, FAANP, FAAN
Associate Dean of Academic Affairs

550 North 3rd Street, Phoenix, AZ 85004
Phone: 602.496.1719 • Fax: 602.496.0545
E-mail: katherine.kenny@asu.edu
Web: <http://nursingandhealth.asu.edu/>

W.P. Carey School of Business – Support Letter

From: [Joan Brett](#)
To: [Kristen Will](#)
Subject: RE: Support Memo for Graduate Certificate Program
Date: Wednesday, February 10, 2016 3:46:57 PM

Dear Kristen,

This email conveys the support of the Graduate Programs Office of the W.P. Carey school of Business for a new Graduate Certificate in the Science of Health Care Delivery within the College of Health Solutions.

I have reviewed the proposal and find that the proposed certificate does not impact or compete with our existing programs.

Best wishes for the success of this certificate program.

Joan

Joan F. Brett
Associate Dean
Graduate Programs
Arizona State University | W. P. Carey School of Business



Sandra Day O'Connor College of Law – Support Letter

From: Leslie Mamaghani <leslie.mamaghani@asu.edu>
Date: February 11, 2016 at 1:50:39 PM MST
To: Kristen Will <kkwill@asu.edu>
Subject: RE: Support Memo for Graduate Certificate Program

Hi Kristen.

The College of Law reviewed the certificate proposal and has no objections to the establishment of a graduate certificate - Science of Health Care Delivery.

Good luck with the new certificate program.

Leslie Mamaghani
Assistant Dean of Educational Programs
Sandra Day O'Connor College of Law
Arizona State University
480-965-9042

From: Kristen Will
Sent: Thursday, February 04, 2016 10:34 AM
To: Leslie Mamaghani
Subject: Support Memo for Graduate Certificate Program

Dear Leslie,

Hello! I am a new faculty member in the School for the Science of Health Care Delivery and Director of Executive Education for College of Health Solutions. We are developing a new graduate certificate program in the Science of Health Care Delivery program. To move the approval process forward, I would like to request a support memo from Sandra Day O'Connor, College of Law. This memo verifies that this certificate program has no significant impact on the course offerings in your college. I have attached the application for your review. Essentially, this certificate is 15 credits of the established 30 credit MS Science of Health Care Delivery program already in existence. Thank you for submitting this support memo directly by to me by **Feb. 12th, 2016**. I truly appreciate your support! If you have any questions, please let me know. Thank you!

Kindest Regards,

Kristen

Kristen K. Will, MHPE, PA-C

Director of Executive Education,

College of Health Solutions

Clinical Assistant Professor,

School for the Science of Health Care Delivery

<image001.gif>

College of Health Solutions

550 North 3rd Street | Phoenix, AZ 85004

602.496.0808 | kkwill@asu.edu

College of Liberal Arts and Sciences – Support Letter



February 5, 2016

Kristen K. Will, MHPE, PA-C
Director of Executive Education,
College of Health Solutions
Clinical Assistant Professor,
School for the Science of Health Care Delivery

Dear Ms. Will,

As requested and on behalf of the College of Liberal Arts & Sciences, I have reviewed the proposal provided for a new Graduate Certificate in the Science of Health Care Delivery within the College of Health Solutions. I have also consulted with the Graduate Program in Global Health offered by the School of Human Evolution and Social Change. The proposed Graduate Certificate in the Science of Health Care Delivery complements the graduate offerings in the College of Liberal Arts & Sciences, and we support the approval of this proposal.

Sincerely,

A handwritten signature in blue ink that reads "Kenro Kusumi". The signature is written in a cursive style and includes a long horizontal flourish extending to the right.

Kenro Kusumi,
Associate Dean of Graduate Programs,
College of Liberal Arts and Sciences

cc: Kyle Rader, Graduate Programs, CLAS

Office of the Dean

Fulton Center, Suite 145, 900 East University Drive
PO Box 876505, Tempe, AZ 85287-6505
(480) 727-1048 FAX: (480) 965-1093
<http://www.asu.edu/clas/>

(NEW GRADUATE INITIATIVES)

PROPOSAL PROCEDURES CHECKLIST

Academic units should adhere to the following procedures when requesting new curricular initiatives (degrees, concentrations or certificates).

Obtain the required approval from the Office of the Provost to move the initiative forward for internal ASU governance reviews/approvals.

- Establishment of new curricular initiative requests; degrees, concentrations, or certificates
- Rename requests; existing degrees, concentrations or certificates
- Disestablishment requests; existing degrees, concentrations or certificates

Submit any new courses that will be required for the new curricular program to the Curriculum ChangeMaker online course approval system for review and approval.

- Additional information can be found at the Provost's Office Curriculum Development website: [Courses link](#)
- For questions regarding proposing new courses, send an email to: courses@asu.edu

Prepare the applicable proposal template and operational appendix for the proposed initiative.

- New degree, concentration and certificate templates (contain proposal template and operational appendix) can be found at the Provost's Office Curriculum Development website: [Academic Programs link](#)

Obtain letters or memos of support or collaboration. (if applicable)

- When resources (faculty or courses) from another academic unit will be utilized
- When other academic units may be impacted by the proposed program request

Obtain the internal reviews/approvals of the academic unit.

- Internal faculty governance review committee(s)
- Academic unit head (e.g. Department Chair or School Director)
- Academic unit Dean (will submit approved proposal to the curriculumplanning@asu.edu email account for further ASU internal governance reviews (as applicable, University Graduate Council, CAPC and Senate)

Additional Recommendations - All new graduate programs require specific processes and procedures to maintain a successful degree program. Below are items that Graduate Education strongly recommends that academic units establish after the program is approved for implementation.

Set-up a Graduate Faculty Roster for new PhD Programs – This roster will include the faculty eligible to mentor, co-chair or chair dissertations. For more information, please go to http://graduate.asu.edu/graduate_faculty_initiative.

Establish Satisfactory Academic Progress Policies, Processes and Guidelines – Check within the proposing academic unit and/or college to see if there are existing academic progress policies and processes in place. If none have been established, please go to http://graduate.asu.edu/faculty_staff/policies and scroll down to the **academic progress review and remediation processes** (for faculty and staff) section to locate the reference tool and samples for establishing these procedures.

Establish a Graduate Student Handbook for the New Degree Program – Students need to know the specific requirements and milestones they must meet throughout their degree program. A Graduate Student Handbook provided to students when they are admitted to the degree program and published on the website for the new degree gives students this information. Include in the handbook the unit/college satisfactory academic progress policies, current degree program requirements (outlined in the approved proposal) and provide a link to the Graduate Policies and Procedures website. Please go to http://graduate.asu.edu/faculty_staff/policies to access Graduate Policies and Procedures.