

Program:	Health Systems and Design, Cert.			
Cycle:	2016-2017			
Mission Statement:	<p>The mission of Center for Health Systems & Design, which awards the Certificate in Health Systems and Design, is to improve healthcare environments by promoting teaching, research and outreach in an interdisciplinary program that focuses on health facility design and planning. Our goal is to support an aggressive and comprehensive research and teaching initiative, which addresses the impact of environmental design on health, using an interdisciplinary team approach. Through this certificate, graduate students are given the opportunity to increase their depth of knowledge in the design and operation of health related facilities and facilities that protect and develop health in preparation for a career characterized by a special knowledge of the ways design impacts health.</p> <p>Additional Information: Although the majority of certificate students come from the architecture graduate program, graduate students from other disciplines (e.g., engineering, public health) have also received the certificate, and it prepares them for careers in a design, engineering, operations, or management with specialized knowledge of how built environments influence health.</p>			
Outcome/Objective	Measure	Target	Finding	Action Plan
Outcome 1: Graduates will demonstrate healthcare knowledge beyond the foundation discipline through an ability to apply planning and design theory and concepts in the formulation of a final study project (Capstone / Thesis project).	Measure 1: All students must develop and successfully defend their final study project. This includes developing the problem, performing a thorough site analysis and developing a creative design solution for a health related project. The student can effectively develop and communicate their design to a panel of faculty and practitioners.	Student will score a 3 or better on this portion of the rubric. The committee members will look for and evaluate the students: a. application of knowledge gained from core Architecture courses b. ability to synthesize problem solving and decision making c. ability to apply the knowledge gained through health care discipline courses and internship	Target: Met Over the course of the 16-17 academic year, 20 students received the certificate. The average score on the healthcare specialization knowledge section of the rubric was 4.55, and all students scored 4 (45%) or 5 (55%). In the secondary section related to critical thinking, all students scored over 3 (50% scored 4; 50% scored 5), and the average rating was 4.5. Compared to scores from 2015-2016 (based on only 8 students), this year's scores are slightly lower, though they still meet the target.	Although all targets were met, in 2017-2018 curricular changes will be made to address students' healthcare specialization knowledge. This area of improvement was identified because it is the lowest average from the findings this year, relates to the core mission of the certificate, and faculty as well as the Center Director see an opportunity to improve student learning by making one course (ARCH 674) part of the first year curriculum rather than elective and offering more sections of the course.
Outcome 2: Graduates will demonstrate effective communication skills verbally and graphically using a variety of media. This should include verbal presentation with an audience / client, appropriate digital visual / graphical communication skills and freehand sketching with conceptual diagramming.	Measure 1: All students must develop and successfully defend their final study project. This includes developing the problem, performing a thorough site analysis and developing a creative design solution for a health related project. The student can effectively develop and communicate their design to a panel of faculty and practitioners.	Students will score a 3 or better in the communication portion of the assessment rubric. Student will demonstrate: a. The ability to conduct a verbal presentation for an audience and / or client b. Visual / graphical communication skills in digital presentations, free hand sketching and conceptual diagramming	Target: Met Over the course of the 16-17 academic year, 20 students received the certificate. The average score on the communication section of the rubric was 4.65, and all students scored 4 (35%) or 5 (65%). Compared to scores from 2015-2016 (based on only 8 students), this year's scores are slightly lower (4.65 versus 5), though they still meet the target.	<i>No affiliated Action Plan</i>

<p>Outcome 3: Graduates will demonstrate the ability to work collaboratively by integrating flexibility in personal values to the worth of other's professional opinions. Additionally demonstrate the ability to work with others to support a shared purpose or goal.</p>	<p>Measure 1: All students must develop and successfully defend their final study project. This includes developing the problem, performing a thorough site analysis and developing a creative design solution for a health related project. The student can effectively develop and communicate their design to a panel of faculty and practitioners.</p>	<p>Student will score a 3 or better on the work collaboratively portion of the final study rubric. This will include: a. Showing professional flexibility in adjusting personal values and beliefs to accommodate the worth of other's professional opinion b. Working with others to support a shared purpose or goal</p>	<p>Target: Met Over the course of the 16-17 academic year, 20 students received the certificate. The average score on the work collaboratively section of the rubric was 4.75, and all students scored 4 (25%) or 5 (75%). Compared to scores from 2015-2016 (based on only 8 students), this year's scores are slightly lower (4.75 versus 5), though they still meet the target.</p>	<p><i>No affiliated Action Plan</i></p>
<p>(Analysis Question #1) Consider the Findings and the Action Plan(s) established this cycle. How did the program/unit identify these next steps for action? Why does the program/unit believe this Action Plan(s) should improve future assessment results?</p>	<p>The average scores in the area of healthcare specialization knowledge were the lowest of the three measured on the rubric. The Center Director and faculty have identified, through their professional experience and judgment, one area that the students struggle with, which is their lack of knowledge of the American system of healthcare. This hinders their progress through the certificate sequence.</p> <p>Currently, the majority of students earning the Health Systems & Design certificate are international and therefore largely unfamiliar with the American system of healthcare. Faculty have noticed that they tend to struggle later in their studio coursework in designing health related projects when they do not understand the healthcare system. This may also shed some light on this year's findings.</p> <p>However, one course that is currently listed as an elective addresses this issue (ARCH 674 Typologies of Contemporary Hospital Design) by giving students a good overview and some foundational knowledge for students unfamiliar with the system. We have identified courses that would also offer this foundation. They are LAND 620, and 621, and PHPM 605, 614, 617, 619, 638, and 640. One of these recommended courses will be required for the first year in the program to provide the basic knowledge of hospital & healthcare design in the United States context, and then students will be able to successfully complete their later studio course where they must apply the knowledge by completing a healthcare design project. Barring unforeseen barriers to implementation, this change will come in to effect beginning with the Fall 2018 certificate cohort.</p>			
<p>(Analysis Question #2) Provide an update for completed or ongoing action plans from the previous year(s). Discuss any successes, challenges, and/or obstacles the program/unit has experienced while implementing the Action Plan(s). Address whether or not the program/unit has seen any improvement in assessment results for the targeted Outcome(s) the Action Plan(s) were designed to address and why the action plan may/may not have resulted in improvements.</p>	<p>The previous action plan had to do with developing indirect measures of student learning to triangulate the findings from the direct measures and attempt to validate the results. At the time the plan was written, there was a transition in leadership for the Center which oversees the certificate. The new director has since been hired but the action plan was not implemented because the new director set different priorities for the certificate program including focusing on expanding the certificate's reach to other disciplines. The 2016-17 year was the first year the new director was present for any assessment and going forward is involved in setting goals and action plans related broadly to the Center and specifically to student learning among those receiving the certificate.</p> <p>In terms of other previous action plans related to structural changes occurring in the Architecture program, those plans and changes are ongoing. One challenge the certificate faces due to being housed within a center is that the certificate has little control over the curriculum; instead, changes to courses or curriculum have to occur within the various departments, though the center fellows are involved and provide input to some degree in those changes. The specific change that was referenced previously was a change to the way the Master of Architecture degree program (the home department of the majority of HSD certificate students) set up its final study to be integrated into the curriculum (as opposed to an independent project, which was previously the case). While still in an experimental phase, this change has been implemented and affects the certificate in that the two related courses where the final project has been integrated (607 and 608) have increased in size considerably to accommodate the number of students interested and in that specific health-related learning objectives had to be integrated into the course. The changes to 607 and 608 have been implemented and are ongoing. In terms of student learning this change has only been implemented for a short time, but there are both benefits and disadvantages. The benefit is that students get an entire year to develop their final projects, allowing them to engage more deeply with the material, get more feedback, and have more time to execute their ideas. On the other hand, because the final project is now completed as a course and the healthcare design specialization is popular, the course enrollments are larger than they used to be (under the new structure, all students focusing on the same specialized type of design take the same section).</p>			