UNIVERSITY OF SAN FRANCISCO College of Arts and Sciences

ASSESSMENT REPORT REMOTE/DISTANCE LEARNING

Architecture and Community Design_Aggregate Report

ASSESSMENT REPORT ACADEMIC YEAR 2019 – 2020

ARCHITECTURE AND COMMUNITY DESIGN – ARCD MAJOR
ARCHITECTURE AND COMMUNITY DESIGN – ARCD MINOR
ARCHITECTURAL ENGINEERING – ARCE MINOR

Architecture and Community Design (ARCD) Major and Minor

I. LOGISTICS

1. **Please indicate the name and email of the program contact person to whom feedback should be sent (usually Chair, Program Director, or Faculty Assessment Coordinator).**

Feedback for the Architecture Major and Minor program should be sent to Architecture Program Director Seth Wachtel (slwachtel@usfca.edu).

2. **Please indicate if you are submitting report for (a) a Major, (b) a Minor, (c) an aggregate report for a Major and Minor (in which case, each should be explained in a separate paragraph as in this template), (d) a Graduate or (e) a Certificate Program.**
Please also indicate which report format are you submitting –Standard Report or Reflections Document

This is an aggregate report for the Architecture Major and Minor programs (pages 2 through 5), and for the Architectural Engineering Minor Program (pages 6 though 9). This is an alternative assessment for remote/distance learning.

3. Have there been any revisions to the Curricular Map in 2019-2020 academic year? If there has been a change, please submit the new/revised Curricular Map document.

There were no revisions to the Curricular Map in the 2019-2020 academic year for the Architecture Major or Minor program.

II. MISSION STATEMENT & PROGRAM LEARNING OUTCOMES

1. Were any changes made to the program mission statement since the last assessment cycle in October 2019? Kindly state "Yes" or "No." Please provide the current mission statement below. If you are submitting <u>an aggregate report, please provide the current mission statements of both the major and the minor program</u>

Mission Statement (ARCD Major):

No changes.

Architecture and Community Design combines an introduction to the disciplines of architecture, urban design, and landscape design with an emphasis on the social sciences and the humanities. The program reflects the university's mission and commitment to building community toward a more just and humane world, within the larger framework of political and cultural issues. Students engage with and learn from the city and surroundings through innovative architectural design and real world projects that make a significant difference in the lives of underserved communities. Through this process, students learn to become impassioned readers, interpreters, actors, and designers of their cities, institutions, and communities.

Mission Statement (ARCD Minor):

No changes.

The Minor in Architecture is designed to provide the non-architecture Major with an appreciation of design, architectural history, urban planning and design, community outreach as it relates to architectural and landscape design projects in underserved communities, and elective technical skills in CAD.

3. **Were any changes made to the program learning outcomes (PLOs) since the last assessment cycle in October 2019? Kindly state "Yes" or "No." Please provide the current PLOs below. If you are submitting <u>an aggregate report, please provide the current PLOs for both the major and the minor programs.</u>**

   Note: Major revisions in the program learning outcomes need to go through the College Curriculum Committee (contact: Professor Joshua Gamson, <u>gamson@usfca.edu</u>). Minor editorial changes are not required to go through the College Curriculum Committee.

PLOs (ARCD Major):

No changes.

Students will:

- Gain a historical foundation of architecture from pre-history to recent developments in the field through a broad and inclusive approach to the range of social and economic factors affecting the design of world cities and buildings
- Develop familiarity with social justice issues in under-served communities and developing regions of the world as well as more traditional perspectives on architectural history
- Develop critical skills and methodologies of inquiry, analysis, conceptual development, and resolution and presentation of design ideas
- Learn to integrate aspects of site, program, space, structure and material to create designs for buildings, which also actively respond to the historical, cultural, social and political exigencies of time and place
- Develop analytical tools that give attention to the various historic and social forces that intersect to create the built environment
- Gain a solid foundation in technical and conceptual design skills, enabling them to present their architectural ideas visually, verbally and in writing to clients, associates, and communities at the grass roots and municipal levels
- Graduate with the knowledge and skills enabling them to facilitate positive change to built environments in the world

PLOs (ARCD Minor):

No changes.

Students will:

• Demonstrate foundational knowledge of the historic development of architecture and cities and a overview of theories, analysis and criticisms related to historical buildings, landscapes, and cities

• Develop an understanding of modes of architectural observation, analysis and representation of the built environment, spatial and formal expression, and the role of society and culture in the process of architectural design

• Explain the importance of using architectural skills to work with diverse communities both locally and internationally to create positive social change in the built environment

• Articulate the various factors that affect the relationship of ecology and environment to cities and buildings

• Acquire the concepts of structure and materials in the design and construction of buildings, and methods of civil and structural engineering.

III. REMOTE/DISTANCE LEARNING

1. What elements of the program were adaptable to a remote/distance learning environment?

ARCD Major and minor:

Lecture and seminar courses pivoted relatively well to remote instruction but the lack of in-person faculty/student interaction detracted from the overall educational experience. Computer skill-oriented courses were adaptable to remote instruction but challenged by PC/MAC platform and screen-sharing issues.

2. What elements of the program were not adaptable to a remote/distance learning environment?

ARCD Major and minor:

The pivot to remote instruction was less successful in studio and lab courses that typically involve regular and extensive one-on-one faculty/student interaction in the XARTS studios. Hand-drawing and hand-

drafting exercises were eliminated, modified or limited by the digital gap between instructor and students, or by unequal access amongst students to drawing materials and tools. Student-to-student interaction, another essential characteristic of the studio environment, was severely limited or non-existent in the remote environment. Additionally, hands-on material lessons and field trips to professional offices and construction sites were not feasible during remote instruction nor fully offset by videos and virtual presentations.

3. **What was the average proportion of synchronous versus asynchronous learning for your program or parts thereof? A rough estimate would suffice.**

ARCD Major and minor:

Approximately 95% of remote instruction was synchronous, with asynchronous instruction primarily attributable to globally-dispersed students.

4. **For what aspects of learning is synchronous instruction effective and for which ones is asynchronous instruction more effective?**

ARCD Major and minor:

Synchronous instruction was more effective for a substantial percentage of remote instruction. That said, asynchronous instruction was more effective for globally-dispersed students and for students with intermittent WiFi, family, personal and/or health issues.

5. **As remote/distance learning continues in the current environment, what changes has the program instituted based on experiences with remote instruction?**

ARCD Major and minor:

Wider and more creative use of digital whiteboard and other digital applications.

Faculty sharing of remote instruction tips and experiences.

Increased office hours and flexible schedules.

Architectural Engineering (ARCE) Minor

I. LOGISTICS

1. **Please indicate the name and email of the program contact person to whom feedback should be sent (usually Chair, Program Director, or Faculty Assessment Coordinator).**

Feedback for the Architectural Engineering Minor program should be sent to both Architecture Program Director Seth Wachtel (slwachtel@usfca.edu) and ARCE Minor Program Coordinator Hana Böttger, hana.bottger@usfca.edu.

2. **Please indicate if you are submitting report for (a) a Major, (b) a Minor, (c) an aggregate report for a Major and Minor (in which case, each should be explained in a separate paragraph as in this template), (d) a Graduate or (e) a Certificate Program.**
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There were no revisions to the Curricular Map in the 2019-2020 academic year.

II. MISSION STATEMENT & PROGRAM LEARNING OUTCOMES

1. **Were any changes made to the program mission statement since the last assessment cycle in October 2019? Kindly state "Yes" or "No." Please provide the current mission statement below. If you are submitting <u>an aggregate report, please provide the current mission statements of both the major and the minor program</u>**

Mission Statement (ARCE Minor):

No changes.

The minor in Architectural Engineering draws upon the strengths and offerings of the Architecture program to provide students of all related majors a significant introduction to engineering study. This minor program promotes and provides students of adjacent majors the techniques of engineering problem solving, and collaboration with the engineering community as essential aspects of many design and science fields.

3. **Were any changes made to the program learning outcomes (PLOs) since the last assessment cycle in October 2019? Kindly state "Yes" or "No." Please provide the current PLOs below. If you are submitting <u>an aggregate report, please provide the current PLOs for both the major and the minor programs.</u>**
   Note: Major revisions in the program learning outcomes need to go through the College Curriculum Committee (contact: Professor Joshua Gamson, gamson@usfca.edu). Minor editorial changes are not required to go through the College Curriculum Committee.

PLOs (ARCE Minor):

No changes.

Students will:

• Develop and demonstrate knowledge of foundational physics and math skills to apply to techniques of engineering design and engineering science.

• Demonstrate a basic physical intuition for engineering concepts, by incorporating engineering as an integral part of the design process.

• Work with local and international communities to design solutions which best serve the needs of a partnering community.

• Gain knowledge of and exposure to design and engineering decisions creating positive change in the environment, both socially and ecologically.

1. What elements of the program were adaptable to a remote/distance learning environment?

ARCE Minor:

Both of the required courses, ARCD 310: Intro to Construction Materials and ARCD 360: Intro to Structural Engineering, transitioned relatively easily to the remote mode. Both prerequisite courses, MATH 107/109: Calculus and PHYS 110/130: Physics I were also successfully transferred to remote formats. Of the elective courses (8 units required), the computer skill-oriented courses ARCD 270: BIM & Applications, and ARCD 300: CAD 2: GIS for Architecture were also adaptable to remote modes.

2. What elements of the program were not adaptable to a remote/distance learning environment?

ARCE Minor:

Courses emphasizing group work and hands-on experimental work suffered for this new format and were compromised significantly. All were in the realm of electives counting toward the 8 units of electives required for the minor:

ARCD 370: Construction Innovation Lab ARCD 372: Engineering, Design and Testing In both cases (both were spring semester courses), physical building and experimental work came to a halt and the focus shifted to other data-oriented, organizational, literature research or design-only elements of the project that would still benefit the community partners who were linked to each project.

3. What was the average proportion of synchronous versus asynchronous learning for your program or parts thereof? A rough estimate would suffice.

ARCE Minor:

Delivery was planned to be 100% synchronous, and ended up >95% synchronous only due to technical issues such as internet connectivity loss requiring recorded lectures to be uploaded afterwards.

4. **For what aspects of learning is synchronous instruction effective and for which ones is asynchronous instruction more effective?**

ARCE Minor:

Generally, synchronous instruction seems to be effective for all typical aspects of teaching. The only time asynchronous instruction was notably useful was when class time was used for 1-on-1 consultations on individual projects, but a lecture was additionally recorded and uploaded in order to keep up the flow of content.

5. **As remote/distance learning continues in the current environment, what changes has the program instituted based on experiences with remote instruction?**

ARCE Minor:

• Assembling and shipping of experiential learning kits to individual students at start of semester

• For hands-on lab experiences, division of lab into pre-lab calculations and predictions, the test itself, and post-lab data analysis where the middle section (the test) is simulated or represented by videos, and data is then supplied for students to analyze, plot, etc

• Greater number of individual office hours in addition to general hours of availability

• Almost exclusive use of Canvas for communications and distribution of materials Creation of videos, wiki-pages or web-based formats as deliverable of final projects instead of static slide presentations