

## **2021 Annual Assessment Report**

**Architecture: BA with major in Architecture (ARCH), ARCH minor, ARCE minor**

**Department of Art + Architecture**

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### **Note:**

This report contains assessments for three programs; BA major in Architecture, minor in Architecture, and minor in Architectural Engineering. The report for the Architectural Engineering minor is submitted as a separate document.

### **Program Name Change:**

During academic year 2020-2021, faculty in the “Architecture and Community Design” program determined it was necessary to change the official title of the major to “Architecture” due to a technical decision by the State of California’s Architects License Board. While the Board remains impressed and fully satisfied with the USF Architecture curriculum and learning outcomes of the program, they were unable to come to terms with the program title that includes “Community Design” along with “Architecture”. The State was so challenged with the title “Architecture and Community Design” that they determined they would reduce student credit toward licensure from 3.5 years to 1 year, unless the name were changed to the single word “Architecture”. USF Architecture faculty and A&S administration decided it wasn’t worth a lengthy and costly legal fight with the State of California, so we changed the name of the program to “Architecture” and dropped “and Community Design”.

The absurdity of the State’s position still stings, as the loss of the full title damages the USF brand and the instantly recognizable uniqueness of the program.

### **Mission Statement (ARCH Major):**

(change in program title due to above issue with the State Architects License Board and shortening of statement)

*The major in Architecture combines an introduction to the disciplines of architecture, urban design, and landscape design, through a lens of 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 real world projects that make a significant difference in the lives of underserved communities, as students are prepared for graduate studies and the architecture professions.*

**Mission Statement (ARCH Minor):**

(change in program title due to above issue with the State Architects License Board and shortening of statement)

*The minor in Architecture is designed to provide the non-architecture major with an appreciation of design, architectural history, urban planning and design, and culminates with community outreach in architectural and landscape design projects with underserved communities.*

**Program Learning Outcomes (ARCH Major):**

(unchanged)

ARCH Major Program Learning Outcomes are organized into three categories:

- A) understanding context (history, culture, community)
- B) gaining technical skills and knowledge
- C) exercising social responsibility (environmental as well as social justice)

1. Students will gain foundational knowledge of the historic development of architecture and cities and an overview of theories, analyses and criticisms related to historical buildings, landscapes and cities.
2.
  - a. Students will gain an understanding of basic visual principles, concepts, and modes of architectural representation.
  - b. Students will learn to observe, analyze and represent the built environment.
  - c. Students will learn concepts of space planning, spatial and formal expression.
  - d. Students will obtain an understanding of structure and material in design and construction of buildings.
  - e. Students will understand the role of society and culture in the process of architectural design.
3. Students will gain knowledge and understand the importance of using architectural skills to work with diverse communities both locally and internationally to create positive social change in the built environment.
4. Students will gain knowledge and understand the various factors that affect the relationship of ecology and environment to cities and buildings.

## ARCH Major PLOs, Courses, Curricular Map: (reduced number of PLOs)

	A	B	C	D	E	F	G
1	ARCH Major: Program Learning Outcomes X Courses	<b>PLO1</b> 1. Students will gain foundational knowledge of the historic development of architecture and cities and an overview of theories, analyses and criticisms related to historical buildings, landscapes and cities.		<b>PLO2</b> 2. a. Students will gain an understanding of basic visual principles, concepts, and modes of architectural representation. b. Students will learn to observe, analyze and represent the built environment. c. Students will learn concepts of space planning, spatial and formal expression. d. Students will obtain an understanding of structure and material in design and construction of buildings.		<b>PLO3</b> 3. Students will gain knowledge and understand the importance of using architectural skills to work with diverse communities both locally and internationally to create positive social change in the built environment.	<b>PLO4</b> 4. Students will learn about the various factors that affect the relationship of ecology and environment to cities and buildings.
2							
3	<b>Courses or Program Requirement</b>	I = Introductory, D = Developing, M = Mastery	<b>Course</b>	I = Introductory, D = Developing, M = Mastery	<b>Course</b>	I = Introductory, D = Developing, M = Mastery	
4	<b>MAJOR REQUIREMENTS IN BOLD TYPE</b>						
5	<b>ARCH 100: Intro to Architecture &amp; Community Design (2 units)</b>	I	<b>ARCH 100</b>		<b>ARCH 100</b>	I	
6	<b>ARCH 101: Architecture History I (2 units)</b>	I	<b>ARCH 101</b>		<b>ARCH 101</b>		
7	<b>ARCH 102: Architecture History II (2 units)</b>	D	<b>ARCH 102</b>		<b>ARCH 102</b>		
8	<b>ARCH 104: Fabrication Lab I (1 units)</b>		<b>ARCH 104</b>	I	<b>ARCH 104</b>		I
9	<b>ARCH 110: Architecture Studio I (4 units)</b>	I	<b>ARCH 110</b>	I	<b>ARCH 110</b>		
10	<b>ARCH 120: Architecture Studio II (4 units)</b>	I	<b>ARCH 120</b>	D	<b>ARCH 120</b>	I	
11	<b>ARCH 150: Architectonics I (2 units)</b>		<b>ARCH 150</b>	I	<b>ARCH 150</b>		
12	<b>ARCH 151: Architectonics II (2 units)</b>		<b>ARCH 151</b>	I	<b>ARCH 151</b>		
13	<b>ARCH 203: Architecture History III (2 units)</b>	D	<b>ARCH 203</b>		<b>ARCH 203</b>		
14	<b>ARCH 204: Architecture History IV (2 units)</b>	D	<b>ARCH 204</b>		<b>ARCH 204</b>		
15	<b>ARCH 220: Landscape Architecture Studio (2 units)</b>		<b>ARCH 220</b>	I	<b>ARCH 220</b>		I
16	<b>ARCH 230: Architecture Studio III (4 units)</b>	D	<b>ARCH 230</b>	D	<b>ARCH 230</b>	D	
17	<b>ARCH 240: Materials &amp; Methods of Architecture (formerly Studio IV) (4 units)</b>		<b>ARCH 240</b>	D	<b>ARCH 240</b>		D
18	<b>ARCH 250: Computer-Aided Design and Drawing I (4 units)</b>		<b>ARCH 250</b>	I	<b>ARCH 250</b>		
19	<b>ARCH 270: BIM and Applications (2 units)</b>		<b>ARCH 270</b>	D	<b>ARCH 270</b>	D	
20	<b>ARCH 300: Computer-Aided Design and Drawing II (2 units)</b>		<b>ARCH 300</b>	D	<b>ARCH 300</b>		
21	<b>ARCH 310: Introduction to Construction Materials (4 units)</b>		<b>ARCH 310</b>	D	<b>ARCH 310</b>		D
22	<b>ARCH 312: Environmental Control Systems (4 units)</b>		<b>ARCH 312</b>	D	<b>ARCH 312</b>		D
23	<b>ARCH 320: Sustainable Design (4 units)</b>		<b>ARCH 320</b>	D	<b>ARCH 320</b>	D	D
24	<b>ARCH 322: Sustainable and Equitable Design (4 units)</b>		<b>ARCH 322</b>	D	<b>ARCH 322</b>	D	D
25	<b>ARCH 325: Introduction to Landscape Architecture (2 units)</b>	I	<b>ARCH 325</b>	D	<b>ARCH 325</b>		D
26	<b>ARCH 340: International Projects (2-4 units)</b>	D	<b>ARCH 340</b>	D	<b>ARCH 340</b>	D	D
27	<b>ARCH 345SL: International Development &amp; Community Outreach (SL) (4 units)</b>		<b>ARCH 345SL</b>		<b>ARCH 345SL</b>	D	D
28	<b>ARCH 348SL: International Outreach Immersion (SL) (4 units)</b>		<b>ARCH 348SL</b>		<b>ARCH 348SL</b>	D	D
29	<b>ARCH 350: Architecture Studio V (4 units)</b>	D	<b>ARCH 350</b>	D	<b>ARCH 350</b>	D	
30	<b>ARCH 360: Introduction to Structural Engineering (4 units)</b>		<b>ARCH 360</b>	D	<b>ARCH 360</b>		
31	<b>ARCH 370: Construction Innovation Lab (2-4 units)</b>		<b>ARCH 370</b>	D	<b>ARCH 370</b>	D	D
32	<b>ARCH 372: Engineering, Design and Testing (2-4 units)</b>		<b>ARCH 372</b>	D	<b>ARCH 372</b>	D	D
33	<b>ARCH 400SL: Community Design Outreach Studio (Service-Learning) (4 units)</b>	M	<b>ARCH 400SL</b>	M	<b>ARCH 400SL</b>	M	M
34	<b>ARCH 401: Architectural Theory and the Written Word (4 units)</b>	M	<b>ARCH 401</b>		<b>ARCH 401</b>	M	
35	<b>ARCH 410: Portfolio Lab (2 units)</b>		<b>ARCH 410</b>		<b>ARCH 410</b>		
36	<b>ARCH 430: Professional Practice/Internship (4 units)</b>		<b>ARCH 430</b>		<b>ARCH 430</b>	M	
37	<b>ARCH 498: Thesis Preparation Seminar (2 units)</b>	M	<b>ARCH 498</b>	M	<b>ARCH 498</b>	M	
38	<b>ARCH 499: Honors Thesis Seminar (2 units)</b>	M	<b>ARCH 499</b>	M	<b>ARCH 499</b>	M	
39							
40	<b>ARCH MAJOR REQ'TS OUTSIDE ARCH CURRICULUM</b>						
41	<b>MATH 107: Calculus for the Liberal Arts or MATH 109: General Calculus</b>						
42	<b>PHYS 100 w/Lab or PHYS 110 w/Lab or PHYS 130 w/Lab</b>						
43							
44							

## ARCH Major PLOs, ILO Curricular Map: (reduced number of PLOs)

	A	B	C	D	E
1	Institutional Learning Outcomes X Program Learning Outcomes	<b>PLO1</b> 1. Students will gain a broad understanding of the historic development of architecture and cities and an overview of theories, analyses and criticisms related to historical buildings, landscapes and cities.	<b>PLO2</b> 2. a. Students will gain an understanding of basic visual principles, concepts, and modes of architectural representation. b. Students will learn to observe, analyze and represent the built environment. c. Students will learn concepts of space planning, spatial and formal expression. d. Students will obtain an understanding of structure and material in design and construction of buildings. e. Students will understand the role of society and culture in the process of architectural design.	<b>PLO3</b> 3. Students will gain knowledge and understand the importance of using architectural skills to work with diverse communities both locally and internationally to create positive social change in the built environment.	<b>PLO4</b> 4. Students will learn about the various factors that affect the relationship of ecology and environment to cities and buildings.
2					
3	<b>Institutional Learning Outcomes</b>				
4	1. Students reflect on and analyze their attitudes, beliefs, values, and assumptions about diverse communities and cultures and contribute to the common good.	X		X	
5	2. Students explain and apply disciplinary concepts, practices, and ethics of their chosen academic discipline in diverse communities.	X	X	X	X
6	3. Students construct, interpret, analyze, and evaluate information and ideas derived from a multitude of sources.	X	X	X	X
7	4. Students communicate effectively in written and oral forms to interact within their personal and professional communities.	X	X	X	X
8	5. Students use technology to access and communicate information in their personal and professional lives.		X		X
9	6. Students use multiple methods of inquiry and research processes to answer questions and solve problems.	X	X		X
10	7. Students describe, analyze, and evaluate global interconnectedness in social, economic, environmental and political systems that shape diverse groups within the San Francisco Bay Area and the world.	X		X	
11		Key			
12		I = Introductory			
13		D = Developing			
14		M = Mastery			

**Program Learning Outcomes (ARCH Minor):**  
(unchanged)

The primary difference between the ARCH Major and ARCH Minor Program Learning Outcomes is in the area of technical skill development.

1. Students will gain an overview of the historic development of architecture and cities and an overview of theories, analyses and criticisms related to historical buildings, landscapes and cities.
2.
  - a. Students will gain a basic understanding of visual principles, concepts, and modes of architectural representation.
  - b. Students will learn techniques to observe, analyze and represent the built environment.
  - c. Students will become familiar with the role of society and culture in the process of architectural design.
3. Students will gain knowledge and understand the importance of using architectural skills to work with diverse communities both locally and internationally to create positive change in the built environment, both socially and ecologically.

**ARCH Minor PLO x Courses Curricular Map**  
(with reduced number of PLOs)

	PLO1		PLO2		PLO3
1					
2	<b>Architecture Minor Program Learning Outcomes X Courses</b>				
3	1. Students will gain an overview of the historic development of architecture and cities and an overview of theories, analyses and criticisms related to historical buildings, landscapes and cities.				
4	2. a. Students will gain a basic understanding of visual principles, concepts, and modes of architectural representation. b. Students will learn techniques to observe, analyze and represent the built environment. c. Students will become familiar with the role of society and culture in the process of architectural design.				
5	3. Students will gain knowledge and understand the importance of using architectural skills to work with diverse communities both locally and internationally to create positive change in the built environment, both socially and ecologically.				
6	I = Introductory, D = Developing, M = Mastery	Course		Course	
7	<b>REQUIRED COURSES (10-UNITS)</b>				
8	ARCH 100: Intro to Architecture & Community Design (2 units)	I	ARCH 100	ARCH 100	I
9	ARCH 110: Architecture Studio I (4 units)	I	ARCH 110	ARCH 110	
10	ARCH 400SL: Community Design Outreach Studio (SL) (2-4 units)	M	ARCH 400SL	ARCH 400SL	M
11	<b>SELECT A MINIMUM OF TWO OF THE FOLLOWING (4-UNITS + CORE F)</b>				
12	ARCH 101: Architecture History I (2 units)	I	ARCH 101	ARCH 101	
13	ARCH 102: Architecture History II (2 units)	D	ARCH 102	ARCH 102	
14	ARCH 203: Architecture History III (2 units)	D	ARCH 203	ARCH 203	
15	ARCH 204: Architecture History IV (2 units)	D	ARCH 204	ARCH 204	
16	<b>SELECT A MINIMUM OF ONE OF THE FOLLOWING (4-UNITS)</b>				
17	ARCH 120: Architecture Studio II (4 units)	I	ARCH 120	ARCH 120	I
18	ARCH 320: Sustainable Design (4 units)		ARCH 320	ARCH 320	D
19	ARCH 322: Sustainable and Equitable Design (4 units)		ARCH 322	ARCH 322	D
20	<b>SELECT A MINIMUM OF ONE OF THE FOLLOWING ELECTIVES</b>				
21	ARCH 150: Architectonics I (2 units)		ARCH 150	ARCH 150	
22	ARCH 151: Architectonics II (2 units)		ARCH 151	ARCH 151	
23	ARCH 220: Landscape Architecture Studio (2 units)		ARCH 220	ARCH 220	
24	ARCH 250: Computer-Aided Design and Drawing I (4 units)		ARCH 250	ARCH 250	
25	ARCH 270: BIM and Applications (2 units)		ARCH 270	ARCH 270	D
26	ARCH 300: Computer-Aided Design and Drawing II (2 units)		ARCH 300	ARCH 300	D
27	ARCH 310: Introduction to Construction Materials (4 units)		ARCH 310	ARCH 310	D
28	ARCH 312: Environmental Control Systems (4 units)		ARCH 312	ARCH 312	D
29	ARCH 325: Introduction to Landscape Architecture (2 units)	I	ARCH 325	ARCH 325	D
30	ARCH 340: International Projects (2-4 units)	D	ARCH 340	ARCH 340	D
31	ARCH 345SL: International Development & Community Outreach (SL) (4 units)		ARCH 345SL	ARCH 345SL	D
32	ARCH 348SL: International Outreach Immersion (Service-Learning) (4 units)		ARCH 348SL	ARCH 348SL	D
33	ARCH 360: Introduction to Structural Engineering (4 units)		ARCH 360	ARCH 360	D
34	ARCH 370: Construction Innovation Lab (2-4 units)		ARCH 370	ARCH 370	D
35	ARCH 372: Engineering, Design and Testing (2-4 units)		ARCH 372	ARCH 372	D
36	ARCH 401: Architectural Theory and the Written Word (4 units)	M	ARCH 401	ARCH 401	M
37	<b>ADDITIONAL ELECTIVE COURSES</b>				
38	ARCH 104: Fabrication Lab (1 unit)		ARCH 104	ARCH 104	
39	ARCH 230: Architecture Studio III (4 units)	D	ARCH 230	ARCH 230	D
40	ARCH 240: Materials and Methods of Architecture (formerly Studio IV) (4 units)		ARCH 240	ARCH 240	
41	ARCH 350: Architecture Studio V (4 units)	D	ARCH 350	ARCH 350	D
42	ARCH 410: Portfolio Lab (2 units)		ARCH 410	ARCH 410	
43	ARCH 430: Professional Practice/Internship (4 units)		ARCH 430	ARCH 430	M
44	ARCH 498: Thesis Preparation Seminar (2 units)	M	ARCH 498	ARCH 498	M
45	ARCH 499: Honors Thesis Seminar (2 units)	M	ARCH 499	ARCH 499	M
46					

## ARCH Minor PLOs, ILO Curricular Map:

(with reduced number of PLOs)

	A	B	C	D
1		PLO1	PLO2	PLO3
	Institutional Learning Outcomes X Program Learning Outcomes	1. Students will gain a broad understanding of the historic development of architecture and cities and an overview of theories, analyses and criticisms related to historical buildings, landscapes and cities.	2. a. Students will gain an understanding of basic visual principles, concepts, and modes of architectural representation. b. Students will learn to observe, analyze and represent the built environment. c. Students will learn concepts of space planning, spatial and formal expression. d. Students will obtain an understanding of structure and material in design and construction of buildings. e. Students will understand the role of society and culture in the process of architectural design.	3. Students will gain knowledge and understand the importance of using architectural skills to work with diverse communities both locally and internationally to create positive social change in the built environment.
2				
3	Institutional Learning Outcomes			
4	1. Students reflect on and analyze their attitudes, beliefs, values, and assumptions about diverse communities and cultures and contribute to the	x		x
5	2. Students explain and apply disciplinary concepts, practices, and ethics of their chosen academic discipline in diverse communities.	x	x	x
6	3. Students construct, interpret, analyze, and evaluate information and ideas derived from a multitude of sources.	x	x	x
7	4. Students communicate effectively in written and oral forms to interact within their personal and professional communities.	x	x	x
8	5. Students use technology to access and communicate information in their personal and		x	
9	6. Students use multiple methods of inquiry and research processes to answer questions and solve	x	x	
10	7. Students describe, analyze, and evaluate global interconnectedness in social, economic, environmental and political systems that shape diverse groups within the San Francisco Bay Area and the world.	x		x

### Assessment Note on facility limitations on the ARCH program:

The most recent APR for Architecture, ARCH (Architecture and Community Design, ARCD) was in Fall 2016 as part of the general APR for the Department of Art + Architecture. External assessment of the ARCD program was very positive on the curricular front, with the primary focus of the reviewers on the substandard facilities in which the program is taught. There have been no significant changes by the university to address these major shortfalls, so we continue to teach a respected curriculum and matriculate students who are well prepared for MArch degree programs and professional employment.

Given the challenges of the physical environment of ARCH classrooms, studios, and shop environments, we continue to advocate for better facilities, but focus our primary efforts on improving each course and each sequenced, semester by semester set of courses that comprise the ARCH major and minor programs.

### Assessment for academic year 2020-2021

PLO being assessed (Major and Minor):

#### PLO 2

- Students will gain a basic understanding of visual principles, concepts, and modes of architectural representation.*
- Students will learn techniques to observe, analyze and represent the built environment.*
- Students will become familiar with the role of society and culture in the process of architectural design.*

**Methodology used:**

*Note: The courses assessed are only open to ARCH majors and ARCH minors.*

*Implement a 3-question survey to all graduating seniors, as noted below. Students were given time in the required final course ARCH 430: Professional Practice/Internship and capstone studio ARCH 400: Community Design Outreach. Additionally, we have annually been collecting digital archives of student work coming from the courses. These include images of models, scans of drawings, exams, and papers.*

*As a broad overall assessment, all students answer the following three questions twice during their studies - once within the first semester, and once in the final semester before they graduate. Time shall be set aside in the ARCH 110: Architecture Studio 1 course for the first two questions, and in ARCH 100: Intro to Architecture & Community Design for the third question. As graduating seniors, the first two shall be answered again in ARCH 400SL: Community Design Outreach Studio and the third in ARCH 430: Professional Practice/Internship course.*

- 1. Name and describe one of the most important considerations before beginning design.*
- 2. Draw a sketch of the room you are in now, using whatever technique and mode of graphic expression you would like. (could be a floor plan or a perspective, for example)*
- 3. Describe the role and responsibilities of the architect in a project, and in society.*

*It is expected that answers to each of these questions will indicate the growth and development of socially responsible, environmental designers, as well as provide a holistic assessment of our three broad Program Learning Outcomes.*

*The long-term plan is a multi-year student response to these three questions at the start and then the end of their studies, in order to measure how much they have learned in the areas of our Program Learning Outcomes.*

**Rubric for Performance Indicators of ARCH PLO 2:**

- a. Students will gain a basic understanding of visual principles, concepts, and modes of architectural representation.*

*Introductory*

Students use limited skills, techniques, and processes to create project work that is poorly crafted, both visually and structurally.

*Developing*

Student is able to demonstrate aptitude using a variety of two-dimensional and three-dimensional skills, techniques, and processes.

*Mastery*

Student excels in demonstrating aptitude using a variety of two-dimensional and three-dimensional skills, techniques, and processes.

- b. Students will learn techniques to observe, analyze and represent the built environment*

*Introductory*

Student is unable to complete independent research for their project work by using library collections, digital databases, or visual recording through drawn or photographic means.

*Developing*

Student is able to complete independent research for their project work by using library collections, digital databases, or visual recording through drawn or photographic means.

*Mastery*

Student excels at independent research for their project work by using library collections, digital databases, or visual recording through drawn or photographic means.

- c. Students will become familiar with the role of society and culture in the process of architectural design.*

*Introductory*

*Points of understanding and method of communications must be directed by instructor*

*Developing*

*Student demonstrates awareness of impact of design on society and is capable of basic elements of engagement & communication*

*Mastery*

*Student demonstrates significant sensitivity to impact of design choices on society and culture and is exhibits awareness and values the perspective of the partnering community*

**Results from AY2020-2021:**

The faculty determined that student submissions during the pandemic's remote semesters were too spotty in numbers and too determined by individual circumstance of location and residential setting, for us to trust as reliable data. Now that we are back in regular, in-person classroom teaching, we have undertaken to redo the past year's assessment and expect a more useful data set at the end of AY2021-2022.

**Response to feedback from previous year's report and how ARCH responded to that feedback:**

1. Mission statements were too long, so they are now shorter and more concise
2. PLOs were too numerous, so they are now reduced to four for the ARCH major and three for the ARCH minor