

California State Polytechnic University, Pomona

Interim Progress Report for 2016

Instructions and Template

NOVEMBER 28, 2016

Contents

1. Instructions and Template Guidelines
2. Executive Summary of the Most Recent Visit
3. Template
 - a. Progress in Addressing Not-Met Conditions and Student Performance Criteria
 - b. Plans/Progress in Addressing Causes of Concern
 - c. Changes or Planned Changes in the Program
 - d. Summary of Responses to Changes in the NAAB Conditions (NOTE: Only required if Conditions have changed since the previous visit)
 - e. Appendix (include revised curricula, syllabi, and one-page CVs or bios of new administrators and faculty members; syllabi should reference which NAAB SPC a course addresses)

1. INSTRUCTIONS AND TEMPLATE GUIDELINES

Purpose

Continuing accreditation is subject to the submission of interim progress reports at defined intervals after an eight-year or four-year term of continuing accreditation is approved.

This narrative report, supported by documentation, covers three areas:

1. The program's progress in addressing not-met Conditions, Student Performance Criteria, or Causes of Concern from the most recent Visiting Team Report.
2. Significant changes to the program or the institution since the last visit.
3. Responses to changes in the NAAB Conditions since your last visit (Note: Only required if Conditions have changed since your last visit)

Supporting Documentation

1. The narrative should describe in detail all changes in the program made in response to not-met Conditions, Student Performance Criteria, and Causes of Concern.
2. Provide information regarding changes in leadership or faculty membership. Identify the anticipated contribution to the program for new hires and include either a narrative biography or one-page CV.
3. Provide detailed descriptions of changes to the curriculum that have been made in response to not-met Student Performance Criteria. Identify any specific outcomes expected to student performance. Attach new or revised syllabi of required courses that address unmet SPC.
4. Provide additional information that may be of interest to the NAAB team at the next accreditation visit.

Outcomes

IPRs are reviewed by a panel of three: one current NAAB director, one former NAAB director, and one experienced team chair.¹ The panel may make one of three recommendations to the Board regarding the interim report:

1. Accept the interim report as having demonstrated satisfactory progress toward addressing deficiencies identified in the most recent VTR.
2. Accept the interim report as having demonstrated progress toward addressing deficiencies but require the program to provide additional information (e.g., examples of actions taken to address deficiencies).
3. Reject the interim report as having not demonstrated sufficient progress toward addressing deficiencies and advance the next accreditation sequence by at least one calendar year but not more than three years, thereby shortening the term of accreditation. In such cases, the chief academic officer of the institution will be notified and a copy sent to the program administrator. A schedule will be determined so that the program has at least six months to prepare an Architecture Program Report. The annual statistical report (see Section 9 of the 2014 Conditions) is still required.

Deadline and Contacts

IPRs are due on November 30. They are submitted through the NAAB's Annual Report System (ARS). Contact Kesha Abdul Mateen (kabdul@naab.org) with questions.

Instructions

1. Type all responses in the designated text areas.
2. Reports must be submitted as a single PDF following the template format. Pages should be numbered.
3. Reports are limited to 25 pages/10 MBs.
4. Supporting documentation should be included in the body of the report.
5. Student work is not to be submitted as documentation for a two-year IPR.

¹ The team chair will not have participated in a team during the year in which the original decision on a term of accreditation was made.

2. EXECUTIVE SUMMARY OF 2014 NAAB VISIT

CONDITIONS NOT MET

2014 VTR
None

STUDENT PERFORMANCE CRITERIA NOT MET

2014 VTR
B.2 Accessibility
B.12 Building Materials and Assemblies Integration

CAUSES OF CONCERN

2014 VTR
Studio Culture
Writing Ability (B. Arch only)
Applied Research
Comprehensive Design
Strategic Planning

3. TEMPLATE

Interim Progress Report
California State Polytechnic University, Pomona
School of Architecture
B. Arch [five year undergraduate]
M. Arch. [undergraduate degree + 57 credits]
Last APR submission: 2013
Year of the previous visit: 2014

Please update contact information as necessary since the last APR was submitted.

Chief administrator for the academic unit in which the program is located: Michael Woo, Dean

Provost: Dr. Sylvia A. Alva

President of the institution: Dr. Soraya M. Coley

Individual submitting the Interim Progress Report: Prof. Sarah Lorenzen, Chair

Name of individual(s) to whom questions should be directed: Prof. George Proctor, Associate Chair

Current term of accreditation: 8 year

Text from the most recent VTR or APR is in the gray text boxes. Type your response in the designated text boxes.

a. Progress in Addressing Not-Met Conditions and Student Performance Criteria

B.2 Accessibility

2014 Visiting Team Assessment: In the B. Arch program, the team has concerns regarding the accessibility elements of this criterion. Based upon the review of the information provided in ARC 201 and ARC 303 it was evident that the concepts and requirements related to accessibility were covered extensively in the lecture series information, but the team found little evidence in the student studio work that students had developed the ability to incorporate the requirements of the site access and associated accessibility requirements into the building design.

California Polytechnic University, Pomona 2016 Response: [Click here to enter text.](#)

UNDERGRADUATE PROGRAM

Summary: Accessibility is introduced as a part of the second year curriculum where human scale, proportion, site and environmental design are brought into the design studio. Typically in this year students are introduced to accessible path of travel, ramp design, site grading, vertical circulation, and ADA bathroom design. Accessibility is then expanded in the 3rd year curriculum where ADA compliance is one of the integrated exercises during the first quarter and which is then fully implemented within the integrated design housing design and design development 2-quarter studio sequence.

ARC201/L Second Year Design Studio (Fall)

In the past, ARC 201L included accessibility components in the various assignments. However, the duration for the final project was too short, leading students to ignore the accessibility requirements explored in their warm-up exercises. The current version of ARC 201L identifies accessibility and site design as essential components for learning objectives, which are integrated into the design problem and the student performance evaluation rubric. The studio design project is a Ranger Station in the hills surrounding the Los Angeles basin. An accessible path of travel is introduced early in the design process as one of the generators of the final design. ADA and other planning and code requirements that impact universal access are also considered in design decision-making, i.e. the site setbacks, height and excavation limitations, which affect the design of ramp access to and from the Ranger Station, spaces and accessible bathrooms.

ARC202/L Second Year Design Studio (Winter)

In the past, ARC 202L introduced a museum program in an urban infill site and dealt with ADA vertical circulation in the form of elevators, but did not address path of travel. The current ARC 202L engages in the development of a more complex public program, in the current iteration of the syllabus a museum in Downtown Los Angeles area. The program and site definitions are predefined to enforce a vertical programmatic development of front of the house and back of the house program elements. The objectives and learning outcomes establish that students are required to resolve programmatic sizing, organization, design and formal agendas in concert with access and egress design criteria as laid out in the most recent issue of the ADA Standards for Accessible Design. Path of travel will have enhanced emphasis in the forthcoming iteration of this studio

ARC203/L Second Year Design Studio (Spring)

In the past, ARC203L focused on sustainable design concepts explored in the design of a visitor center. Site grading for building placement was introduced, but we did not include path of travel as a specific exercise or nor emphasized for the final project deliverable. The current ARC203L studio addresses accessibility by requiring evidence in the final design of knowledge of ADA compliant circulation and bathrooms. The topic of accessibility is also addressed in the lecture portion of the class, ARC203, where students take turns experiencing life in a wheelchair for 24 hours and write about their findings on various topics such as bathroom layout, ramp design, curb cut, getting on a bus, plumbing fixtures, casework design, as well as table and counter heights.

ARC301/L Tectonic Studio

The ARC301/L tectonics studio and lecture focuses on structure, building skin, and vertical circulation design elements. These issues are explored in a series of design vignettes that kick off the studio and outcomes are incorporated into the final project. Universal access is part and parcel to all studio work. The final project's program has a public component that requires full exterior accessibility from the public right of way. ADA compliance is one of the integrated exercises.

ARC302/L & ARC 303/L Housing Studio

The third-year curriculum has been adjusted to tie the winter and spring quarters into one linked project. The focus of ARC 302L/302L has and will continue to be housing, but the lecture that is attached to the studio will focus less on historic typologies and more on current design limitations and code restrictions. This has focused on the design of the units per accessible standards and the related infrastructure that supports disabled access in a multi-unit building. The second quarter of the sequence ARC 302L/303L is now dedicated to design development documents that approach construction document level of completion. The goal is to emphasize a more real world design approach with emphasis on building code and systems integration. ADA accessibility are one of many criteria that the project design must reflect with design documentation and drawings demonstrating how an Architect describes issues such as accessible path and parking requirements and interior clearances. In addition, ramps and elevators are required to be detailed in plan and section in the final document set. The ARC 303 lecture continues to be codes; however ADA compliance is one of the integrated exercises in the ARC 302L/303L studio sequence.

GRADUATE PROGRAM

Summary: The graduate program in architecture at Cal Poly Pomona includes courses where requirements for accessibility are discussed during a graduate course in Building Codes and their final studio thesis project as their capstone project. We assign specific deliverable requirements to address ADA throughout the design studio sequence and in program and performance oriented lecture courses. Product deliverables include showing path of travel from the public right of way to the front entry for every studio project beginning in their 2nd year. This includes the design of exterior ramps, sidewalks and stairs. Starting in late 2nd year, interior accessibility requirements are investigated in studio design projects in horizontal and vertical circulation, toilet room clearances and casework. The design outcomes of universal access are represented in final studio products. This is an improvement from past conditions where accessibility was not included as a studio deliverable. We have embarked on new studio requirements based on the most recent NAAB report.

ARC 501/A, ARC 502/L, and ARC 503/L First Year Graduate Design Studios

During the first two quarters of the graduate design studio sequence students are introduced to path of travel requirements and vertical circulation issues that include addressing ADA issues. In the VTR Report from 2014, it was indicated that Site Accessibility was mostly clearly addressed in ARC 503/L. This course continues to address accessibility in the design project, including path of travel, accessibility in rooms, and horizontal and vertical circulation.

ARC 504/L Graduate Tectonics Studio

ARC 504/L students have been introduced to accessibility requirements for ramping and stairs in their studio design. In the ARC 504L tectonics studio, structure, building skin, and vertical circulation design elements are explored in a series of design vignettes that kick off the studio. The initial studio investigations are then incorporated into the final project, a small public building with a multipurpose assembly space, restrooms, and storage. Universal access is part and parcel to all studio work.

ARC505/L, ARC 506/L and ARC 591 Housing Design Development Studio and Codes Course

In ARC 505/L and ARC 506/L, the graduate housing studio, all preliminary planning in ARC 505L has schematic deliverables for accessibility. The codes course ARC 591 covers the rules regarding ADA. The continuation of schematic design and the beginning of design development in ARC 506L requires full exterior accessibility from the public right of way to the entry of every unit. ARC 506L also requires that all the housing units be fully accessible.

ARC 691, ARC 694, and ARC 695 Thesis Project

Since the accreditation team visit, the Department has reorganized the culminating experience for the M.Arch degree. The M.Arch “thesis” curriculum spans the final year of the program. In the fall term students begin investigating their architectural endeavors through the lens of large trends, issues, and problems. In the winter term, students follow with the development of a project program, site design, and schematic design for the condition/problem(s) identified in the fall. Students also identify a taxonomy of solutions for accessibility given their project site and schematic design. In the spring term, the Department hires professional engineering consultants as adjunct faculty, who specifically work with and guide M.Arch students through the technical resolution of their final project. This process conveys building technology and construction methods knowledge, appropriate for their selected structures, materials, systems, and/or equipment. Solving accessibility issues is part and parcel to having the hired technical consultants.

B.12 Building Materials and Assemblies Integration

2014 Visiting Team Assessment: Since the last visit, the second year undergraduate design sequence has been restructured to provide a comprehensive design experience that features integration of building systems. ARC 201/201L focuses on site and environmental issues; ARC 202/202L focuses on program, circulation and design strategies; and ARC 203/203L is integrated with ARC 341 Building Construction, culminating in a project that integrates structural, environmental and design considerations. This integrative system is repeated at a more advanced level in the third year design sequence, ARC 301/301L, ARC 302/302L and ARC 303/303L, which are further integrated with ARC 342 Building Systems and the structures and codes courses to complete an integrative design methodology. M. Arch students continue to show building systems integration in the ARC 505/505L project and thesis project ARC 695.

California Polytechnic University, Pomona 2016 Response: [Click here to enter text.](#)

Summary: Undergraduates and graduates take the same materials construction course sequences ARC 341/A and 342/A. The development of construction means, methods and assemblies is also part of the concurrent design studios. ARC 341/A serves as an introduction to knowledge and techniques in materials and assemblies. ARC 342/A serves as an application of the knowledge and techniques appropriate to the development of a concurrent design studio project.

ARC 341/A – Building Construction I

In ARC 341/A, students learn about and research building materials and construction processes. The origin, application and properties of a wide range of materials are discussed. In a series of assignments, the students obtain some hands-on experience working with materials; they research available industrial products, product applications, and utility for modular or singular purpose. The course is taught as a lecture with a discussion module where students are asked to present their findings. Students receive an overview of the materials application in the construction process and sustainability issues.

While the course is primarily lecture-based covering properties of building materials, wood, concrete, masonry, steel, plastics, glass and materials for thermal enclosure, a number of external lectures have now been integrated into the course including those focused on masonry (Angelus Block), connections (Simpson), architectural product supplies (WHSteele), and Enclosures (Enclos). These lectures serve to bridge the gap between the more abstract discussion of materials in studio and the application of materials in current building construction practice. In the past, ARC 341/A has been primarily lecture based with quizzes and exams serving to test the students’ acquired knowledge. The lab portion of the course now emphasizes hands-on exercises that involve construction drawings and full-scale mock-ups. These exercises provide students with activities in making and forming with concrete, masonry units, wood framing and woodworking. Students also research typical architectural products and their application in architectural case studies. The outcome of the research is presented to the entire class and incorporated into a materials library that is open to all students.

ARC 342/A – Building Construction II

ARC 342/A expands the student knowledge covered in ARC 341/A to more complex principals of architectural materials and construction. Topics covered include soils, grading, foundations, walls, roofs, skins and enclosure systems, and building openings. These topics are related to their applications within designs for concrete, steel and/or wood. ARC 342/A is coordinated with the concurrent design studio for both undergraduates and graduate students. Students are required to complete assignments for ARC 342/A that directly relate to their individual studio design projects, including the preparation of a set of working drawings for their individual studio project. Students utilize the CSI format for specifications in their work.

UNDERGRADUATE PROGRAM

At the time of the last NAAB visit a single undergraduate ARC 303L studio was designated as the comprehensive studio in association with ARC 499 Integrated Structures and ARC 332/A Environmental Controls. After the accreditation visit the faculty voted to create a 2-quarter long sequence where the students have an additional quarter to work out the technical components of their project. The emphasis of ARC 302L/303L is type V construction of a 10-14 unit housing project, typical of the Southern California region. Wall sections and waterproofing details are now an essential part of the deliverable package. Students prepare a material board and also must provide an annotated outline specification that describes the material selection for the design document deliverables for the ARC 303L studio. Concurrent with the ARC303L design development studio, students take the ARC 303 codes course, the 2nd course in Building Construction (ARC 342/A), and the ARC 472/A Building Integration course.

In the first term of the two-quarter integrated studio, students design and produce preliminary plans, sections and elevations of their multi-unit housing project. During the second quarter, students continue developing their individual projects by completing final schematic designs and commence design development of their project. During this phase, students select materials, prepare CSI format outline specifications, prepare structural and environmental control systems, selections/analyses, and develop plans, elevations, building sections, wall sections and details to represent their solutions for building systems integration.

The spring term design development phase of the ARC 302L/303L sequence is coordinated with ARC 472/A (Building Integration) and ARC 342/A (Building Construction II) and ARC 303 (Codes). All four (4) courses are centered on the design studio project. Students are required to convert their design development deliverables into a set of design development drawings. The exercises in ARC 342/A Building Construction 2 include Foundation and Framing plans, Enlarged Sections, Vertical Circulation, Electrical / Lighting/Mechanical, Enlarged Floor Plans and Interior Elevations, Detail drawings as well as Door and Window Schedules and Outline Specifications. Systems and assemblies' integration are investigated and represented in large-scale wall sections and design development details with CSI designations for all building materials. Structural issues are addressed as a coordinated effort of ARC 472/A (Building Integration), and ARC 342/A (Building Construction II) as applied in the ARC303L design studio project. Foundation and framing plans as well as enlarged sections and detail drawings are required deliverables. The wood frame and/or light gauge steel framing are emphasized. Electrical, Lighting, and Mechanical integration are also incorporated into the outcomes coordinated between studio, construction, and the building integration courses.

GRADUATE PROGRAM

At the time of the last NAAB visit the use of materials and assemblies integration was first introduced to the graduate curriculum in the spring quarter of 1st year with ARC341/A (Building Construction I). In the fall of the 2nd year the graduate tectonic studio ARC 504/L is taught in parallel with the first structures course ARC321/A. The ARC504/L tectonics studio and lecture focuses on structure, building skin, and vertical circulation design elements. These issues are explored in a series of design vignettes that kick off the studio and outcomes are incorporated into the final project. Since the NAAB visit this exercise has been expanded to include the requirement that each of the separate vignettes use a variety of structural systems and emphasize the use of specific building materials and assemblies that are appropriate to each design vignette.

At the time of the last NAAB visit there was no formal integration course for the graduate students. In winter and spring of 2015, the graduate curriculum introduced a revised studio sequence for addressing the NAAB Conditions “Not Met” for building materials and integration in association with design studio. We have revised two 2nd year March design studios and set up a two term studio course sequence (ARC505L/ARC506L) where the students design and then produce schematic plans, sections and elevations of a multi-unit housing project on a small urban site, similar to the undergraduate students’ ARC 302/L course. The emphasis of ARC 505L/506L is type V construction of a 10-14 unit housing project, typical of the Southern California region. Wall sections and waterproofing details are now an essential part of the deliverable package. Students prepare a material board and also must provide an annotated outline specification that describes the material selection for the design document deliverables for the ARC 505L studio. Concurrent with the ARC506L design development studio, students take the ARC 342/A (Building Construction II) course and the ARC 591 Building Codes course. Building Systems Integration is the subject of the ARC506 lecture component to the studio.

In the first term of the two-quarter integrated studio students’ design and produce preliminary plans, sections and elevations of their multi-unit housing project. In the second term of the ARC 505L/506L sequence students are required to convert their schematic designs into a set of design development drawings. During this phase, students select materials, prepare CSI format outline specifications, prepare structural and environmental control systems, selections/analyses, and develop plans, elevations, building sections, wall sections and details to represent their solutions for building systems integration. To support these efforts exercises in the associated ARC 342/A (Building Construction II) course include Foundation and Framing plans, Enlarged Sections, Vertical Circulation, Electrical / Lighting/Mechanical, Enlarged Floor Plans and Interior Elevations, Detail drawings as well as Door and Window Schedules and Outline Specifications. Systems and assemblies’ integration are investigated and represented in large-scale wall sections and design development details with CSI designations for all building materials. Structural issues are addressed as a coordinated effort of ARC 342/A and the ARC506L design studio project. Foundation and framing plans as well as enlarged sections and detail drawings are required deliverables. The wood frame and/or light gauge steel framing are emphasized. Electrical, Lighting, and Mechanical integration are also incorporated into the outcomes coordinated between studio, construction, and the building integration courses.

To ensure an understanding of structures and environmental systems ARC 506/L studio graduate students prepare 3D isometric drawings as a part of their design development package for plumbing, HVAC and structural framing (gravity loads and lateral loads) along with 2d schematic diagrams. Students are required to complete basic electrical wiring plans (lighting and convenience outlets) and provide basic electrical calculations. Students have the option of completing a finish physical model showing structural framing (gravity and lateral loading) that also incorporates all plumbing lines (except sprinklers) or they can pursue detailed design development passive day lighting studies for their project. The graduate studio also has field trip to AIA Chapter meetings, CSI product shows, and construction sites for high-density housing projects in the area. The final product for the Comprehensive Studio sequence is a bound booklet, which includes the student’s preliminary designs and the detailed design development drawings. This DD Housing package has proven very valuable for the student’s during internship interviews (students are required to complete 500 hours of IDP prior to graduation.)

b. Plans for/Progress in Addressing Causes of Concern

- **Studio Culture**

2014 Visiting Team Comments: There is concern that the Studio Culture Policy, though it exists, was not fully understood by the student population as indicated during our student meeting. It is recommended that the process for developing the policy is shared with students to invite comment and disseminate the policy in a more formal, direct manner.

California Polytechnic University, Pomona 2016 Response: [Click here to enter text.](#)

The Department of Architecture recently updated its Studio Culture Policies to better define the desired quality and environment of studio (“Shared Values,” “Time Management”, Social Environment”, “Intellectual Environment”, “Physical Environment”, and “Studio Structure and Policies”). The Chair, faculty, and AIAS were all active in creating these policies, and have explained the policies to incoming students and are actively working to reinforce the policies with the entire student population during the school year. Studio Culture Policy is also addressed in the start of the quarter all-Department meetings. In general, students are very supportive of the policy, as are the faculty. Given the importance of time management issues the department faculty and student body have established an exam/review calendar, homework recommendations based on course contact time, and maximum course unit and outside work policies. The entire Studio Culture Policy / Student Handbook is included in the Department website and has been emailed to students.

A copy of the revised Studio Culture Policy for 2016-17 is attached at the end of this document. To see the document online visit: <https://env.cpp.edu/arc/studio-culture-policy>

- **Writing Ability (B. Arch Only)**

2014 Visiting Team Comments: For the B. Arch program, the ability to write effectively needs improvement. Though the majority of the work is acceptable, some samples of written work demonstrate writing skills in need of improvement. Examples of writing skills that suggest this as a concern can be found in the provided work in ARC 299/299A and ARC 464/464A.

California Polytechnic University, Pomona 2016 Response: [Click here to enter text.](#)

In response to the Visiting Team’s 2014 Report, the following measures have been implemented to improve the quality of writing in the classes noted, as well as across the curriculum. The commitment to writing has been implemented through most courses in the curriculum. These include studio courses as well as lecture courses.

LECTURE COURSES

ARC 299/299A The 40 Ideas that Changed Architecture Lecture and Activity

This is a new course (that replaces ENV101), taken by students in the fall quarter of their first year of the B.Arch. The title of the course is a reference to Richard Weston’s 100 Ideas that Changed Architecture (2011), which is the required reading for the class. The course is designed as a critical thinking course and as an introduction to important architectural ideas. A different member of the faculty teaches each lecture, based on their expertise, focused on 4 architectural ideas. In the course students produce three written reviews of lectures, field trips, and exhibitions, as well as eight visual and short essay responses to the weekly lectures/readings. The reviews are 500-words and illustrated by photographs taken by the students. Any references in their text must be properly cited and acknowledged.

The first assignment is a review of the Department’s quarterly student exhibition “Interim,” where the best work of the previous quarter is displayed. Students in ARC 299 must write a 500-word review of one project from Interim. They must describe the project (type, size, location, course #, and author) and discuss the objectives of the project and how the objectives were met. Ideally their discussions include an interview with the student that created the project. Additionally, the student must describe the representations used to explain the project and what made the representations effective in conveying the idea. The second review is based on a field trip the class takes to visit three modernist houses in Los Angeles. Again, this is a 500-word essay. The students are asked to compare an aspect of the three Modernist houses viewed on a field trip: the Schindler House (R.M. Schindler’s own house, 1921), the Hollyhock House (Frank Lloyd Wright, 1917-21), and the Neutra VDL House (Richard J. Neutra, 1932, 1939, 1964). The students may focus on the relationship between interior and exterior spaces, material used in each house, construction methods, views/framing devices, architectural details. Each essay must

be illustrated by photographs of each house that clearly illustrate the focus of the research. The third review is based on an illustrated lecture delivered by the annual Neutra Award for Excellence recipient, given by Cal Poly Pomona College of Environmental Design during the fall quarter. For more information on the Neutra award see: <https://env.cpp.edu/arc/neutra-award>. In 2016 the recipient was Spanish architect Carme Pinós. This is a 500-word review of the work presented in the Neutra Award lecture. Students are asked to compare two or three projects described in the lecture. They are cautioned to correctly cite the projects they reference, including author, location, name of project/client, and date. Students must focus on one aspect of the work such as overall form, shape, type, material, construction technique, use of color, etc.

In addition to the reviews, students are asked to create written and visual responses to the weekly lectures delivered by members of the Cal Poly Pomona faculty. The subject matter of the lectures begins with key architectural issues presented in Richard Weston's book. They include: Program / Form / Typology, Space and Form, Fundamental Principles, Tectonics and Materials, Modern Principles, Architectural Representation, Sustainability and Social Responsibility, and Technology and Adaptability. Students prepare written responses that focus on one key issue per topic as presented by the lecturer and reinforced by the readings. The format of the students' responses consists of photographs taken by the students accompanied by written captions.

Architecture History Sequence ARC 361/A, and ARC 362/A and ARC 363/A

Writing components are central to the learning process and evaluation of students in the survey architecture/theory courses required of second year undergraduates and first year graduate students. In fall quarter students take ARC 361/A: Ancient through Medieval Architecture. In the winter quarter, students take ARC 362/A: Renaissance to Modern Architecture. In the spring quarter they take ARC 363/A: Architectural Theory. In order to create space for the theory class, material covering Renaissance to Modern periods was compressed into a single quarter. In order to assure that the students have good coverage of the modern period, ARC 363/A incorporates much theoretical material from the period. In response to the comments from the NAAB team, the following measures were taken to improve the caliber of student writing and learning in these architecture survey courses:

Quizzes: Four quizzes were substituted for the previous midterm and final exam. These measured more closely student-learning progress. Short essays are part of each quiz.

Activity Section: Each student is responsible for the reading assignments, in addition to their textbook readings. Each week, every student submits a 1-2 page written statement about the assigned reading; these readings are also the basis of class discussion. This is a critical assessment of one or two themes from the assigned writing. Students are evaluated on their written statement and participation in the discussion.

Term Paper: The term paper is based on large topics taken from the period covered. Students select a topic area, and then a specific subject for their papers. They work with a partner in the class to formulate paper topics, though the preparation of all written submittals is an individual effort. Students first submit a one-two paragraph statement about a proposed topic. This is followed by an appointment with the instructor about paper topic. Students next make a presentation in discussion section on their topics. The final submittal is a five page research paper. The research must include at least three (3) different published sources, none of which can be encyclopedia references, website (including Wikipedia) or textbooks for this class, though the latter provides valuable bibliographic information. Only one of the required sources may be a scholarly online reference. Bibliography and footnotes or endnotes are required and paper must be illustrated.

ARC 464/A:

In recognition of the comments from the NAAB team a number of measures were introduced to improve the caliber of research and writing in the course. Writing has always been an emphasis of this survey of American architecture.

Weekly writing assignments: Each week the students read an article or book excerpt separate from their textbook; they are required to prepare a one – two page statement critiquing the assigned reading. The only exception is that for one week's assignment, the students must visit an architecture or design exhibition in southern California (options are provided) and write a critique of that exhibition. Each week the assigned reading/writing assignment is the basis of a discussion assignment. Additionally the subject matter may be included in quizzes throughout the quarter. Students earn a "✓" "✓+" or a "✓-" for the papers. Previously, these assignments were not graded.

Term paper: The term paper has always been an important part of this class, with considerable emphasis placed on critical analysis and writing skill. In order to assist students in developing their papers, the following structure has been implemented: 1) Each student submits a preliminary statement about their proposed paper topic (1 typed paragraph) early in the quarter. 2) Students have a brief appointment about their term paper topic with the instructor. At that, there is considerable discussion on defining the thesis of the research. Additionally bibliographic suggestions are made. 3) Students form a partnership with another student in the class. The partner will read a draft of approximately 50% of an edited paper that is submitted to the instructor. Review of the paper at this point identifies major writing problems. Students are encouraged to visit the university's Writing Center to obtain assistance with their writing. 4) Research must include at least ten (10) different published sources, none of which can be encyclopedia references or textbook for the course. A maximum of two sources may be online references. The paper must be 10-pages in length exclusive of illustrations.

ARC 471/A Professional Practice:

In the professional practice course students interview architects and question them about ethics, legal issues, office organization, legal structure and project delivery in relation to office liability and taxes. The students prepare three 500-word essays covering their observations on Ethics, Legal Issues and Organization.

STUDIO COURSES

Immediately following the accreditation review in 2014 the faculty voted to add a writing requirement to all studio courses within both the undergraduate and graduate program (even though the NAAB Visiting Team's Cause for Concern regarding writing, was only for the B.Arch program). The following is a sampling of the writing requirements we have implemented in the studio courses:

ARC 201/L Second Year Required Studio (Fall)

ARC 201, the lecture portion of ARC 201L has been recently realigned to more closely follow and support the studio course through various additional assignments and readings. The emphasis lies on two components, design methodology and design practice in relation to site treatment and architecture engaging site conditions. Students are asked to relate to assigned readings and practical aspects through analysis of precedents, a critical writing component, and the establishment of a reflective final portfolio, that is in part visual and in part written.

ARC 301/L Third Year Required Studio (Fall)

Students are asked to present their thoughts and strategies for specific steps of the design process in two written essays (approx. 250 words each). The statements are graded on clarity and thought but they are also a measure to evaluate the stringency of the final design project. In the first essay students present their parti and architectural agenda. This statement is accompanied by diagrams that are referenced in the text. In the second essay students describe their designs materials choices. They are asked to link the decisions they made to the strategies previously stated in the first written assignment.

ARC 302/L Third Year Required Studio (Winter)

A 1000 word writing assignment requires students to summarize the zoning requirements for the site and to describe their conceptual design strategy.

ARC 303/L Third Year Required Studio (Spring)

Students incorporate and code analysis and project description as part of their document package. Typically this essay is between 500-1000 words.

ARC 401/405/L Topic Studios

Topic studios have writing assignments related to canonical texts where students are asked to articulate their own positions vis-à-vis course required readings.

ARC 403/L Urban Design Studio

Prior to the NAAB visit ARC 403/L included a writing assignment as part of the lecture component. Students were free to write about any topic that resonated within the broad outlines of the studio problem, typically urban, dense sites with a variety of land uses. Since the accreditation visit and responding to well-known deficiencies in the quality of student writing, the writing exercise has been retooled to require a deeper understanding of the application of research to actual design problematics. If the case studies are about uncovering the history of design and to expose the student to the key building and spatial typologies, then the writing exercise is the application of this knowledge through critical thinking. Instead of merely requiring a paper on a self-selected topic, the writing exercise is now a report on the studio design proposal with guidance from the studio instructors. Students begin a carefully structured process at about the mid-term, when a design proposal has taken shape. Studio instructors ask for an outline and guide the student through pre-determined phases in the writing. Specific sections cover topics such as precedents, the design process and the alternatives the project may yield in terms of conceptual coherence, programmatic response to market forces and architectural massing.

ARC 406/L and 407/L Senior Project

The senior project sequence ARC 406/L and 407/L is a two-quarter studio and research experience that include the development of site criteria, architectural design criteria, and programming, resulting in a final studio design project at the end of the second quarter of the sequence. During the design process students are asked to develop an in-depth understanding of their proposal through detailing, design development documents and written narratives, supported by visual representations. Since the NAAB visit we have broken up the writing components of the Senior Project into multiple short texts that require a variety of writing styles: descriptive, expository, and persuasive.

- **Applied Research**

2014 Visiting Team Comments: While undergraduate and graduate work exhibited indicates that students successfully complete a variety precedent and case study exercises, it is not clear students realize the role that this research offers a design investigation.

California Polytechnic University, Pomona 2016 Response: [Click here to enter text.](#)

UNDERGRADUATE PROGRAM

Summary: After the accreditation visit we have modified the case study assignments in design courses so that students in selected studios use precedent studies as a research tool.

ARC202/L, ARC203/L Second year Design Studios (Winter and Spring)

Second year students analyze buildings and develop diagrams that visually explain the project's main strategies. Different topics are analyzed depending on the studio, for example, circulation and lighting are analyzed in ARC 202/L and massing, geometry, siting, materials are analyzed in ARC 203/L. Drawings, photos, diagrams, are used as investigation tools in all of these studios.

ARC302/L, ARC 303/L Third year Housing Studios (Winter and Spring)

Case studies in ARC 302/L are assigned based on the students' individual program selection. These case studies aim to augment the knowledge of contemporary production of housing, including application of specific construction materials and systems in relation to tectonics, expression, and affordability. Case studies in ARC 303/L allow the student to better understand the technical issues involved in the design of multi-family housing, especially construction materials, construction processes, structural systems, electrical, plumbing and HVAC systems.

ARC 403/L Urban Design Studio

In the past, ARC 403 /L, the Urban Design Studio, was taught solely within the architecture curriculum. We now teach these courses in a cross-disciplinary fashion with the Department of Landscape Architecture. For the 4th year Landscape Architecture students it is their last studio. For the architecture students, it is the jumping off point for the Senior Project. ARC 403/L involves the design of a dense, mixed-use environment and included a research phase that requires the preparation of urban design case studies. These courses also include a writing assignment (typically a 5-page paper). The case studies are focused on building typology as applied to dense urban environments, typically involving mixed-use development. Following the accreditation visit we have modified the case study exercises. The selection of the assigned case studies is now much more varied and diverse and includes specific examples of urban open spaces (plazas, parks, retail environments) that serve to critically analyze and understand not just the buildings but the spaces between buildings and provoke a reexamination of urban space in Western culture. After the visit, the selection of specific case studies illustrative of particular situations in cities became more important. Care is taken that case studies be reflective of current urban dynamics such as housing, gentrification, new transit infrastructure, pedestrian districts and the like with special emphasis on the design of urban landscapes.

In general, we have observed a positive effect caused by the changes we have made. More varied and far-reaching case studies lead to a better understanding of architectural space. Moreover, the structuring of the writing exercise has resulted in a more thoughtful approach, as the students realize they must account for their design choices. This is also apparent in the tone and content of desk crits, where an instructor may call up the content of case studies and challenge a student to respond. The result of these changes is that students are now less prone to defend a design solely on the basis of formal explorations and more on the basis of sound research.

GRADUATE PROGRAM

Summary: Students in the Graduate Program in Architecture at Cal Poly Pomona use precedent studies as an investigation tool in ARC 505/L and in ARC 691 the graduate thesis research.

ARC 505/L Graduate Housing Studio

ARC 505L undertakes the research and design of multi-family housing. This course focuses research through two assignments, a housing case study, and a building and zoning codes research and analysis project. In the first, students research and evaluate case studies from different parts of the world. The case studies are analyzed through the social, formal, and the technical standpoint of human safety (code compliance). Students identify safety concerns as well as design decisions made based on human safety. In the second assignment, students research the applicable building and zoning codes of the design project site prior to performing any design. Students are tested and asked to diagram basic principles of life safety before starting the design project, which led to every design decision being informed by incorporating the code research. This project sequence led to a more tightly controlled design project that easily transitioned into the following ARC 506L studio, furthering building systems integration. At the start of ARC506L student projects are well developed allowing the project design to be in closer agreement with professional standards of design development by the end of the term.

ARC 691 Graduate Thesis Research

The graduate thesis project is a three-quarter sequence that begins with a research phase. In the past, student research was conducted with a course coordinator and a selected advisor who served as technical expert. After the accreditation visit and responding to the need for more focused research leading to better design outcomes, we adopted a more structured approach. The class now meets twice a week in an active seminar format with required deliverables at each session. The research starts with a general investigation of an architectural issue the student has identified and progresses towards more specific and particular investigations. Case studies are required and selected by the students under strict guidelines from the instructor with a view towards the identification of patterns, rules or practices surrounding a particular issue. For example, in examining housing affordability, a student may wish to prove that smaller units are more affordable than bigger units. The instructor would direct the student to search for appropriate examples of buildings containing small units. The case studies may involve research into the current state of rental prices and the corresponding offerings in the local real estate

market. Not just to establish baseline assumptions about unit size but also to understand the typological variations exhibited by denser buildings containing smaller units as contrasted by less-dense high-rent buildings with larger units. Issues to be fleshed out would include unit flexibility and variability, provision of on-site social services, variability of building form, etc. In this way this case study would help to connect affordability to built form.

The research is organized around a 20-page paper with specific sections required and an emphasis on conclusions based on the student's research. A separate document called the Project Proposal is also required and appended to the end of the paper. In support of better research and acknowledging that students need assistance, we switch to half hour one-on-one appointments with the instructor for the second half of the quarter. In the aggregate, we find that this new structure is much more favorable to student research and the interaction during the appointments reinforces trust between the student and the faculty, leading to better results.

- **Comprehensive Design**

2014 Visiting Team Comments: In finding that students were able to produce projects that demonstrated the breadth of comprehensive design decisions in the spring Comprehensive Studio ARC 303/L (undergraduate) and 505/L (graduate), complete accessibility in projects exhibited was a concern. It was mentioned during team conversations with faculty that students would perhaps gain a better grasp of this material if the quarter-long studio were instead a two-quarter sequence or a semester-long offering.

California Polytechnic University, Pomona 2016 Response: [Click here to enter text.](#)

UNDERGRADUATE PROGRAM

Summary: Over the course of the 2015 and 2016 winter and spring quarters the Department of Architecture has modified the curriculum for ARC 302/302L and ARC 303/303L. As described in the 2014 Visiting Team Comments we have continued the process of utilizing a two-quarter process to better address the NAAB requirement of a comprehensive design project. After much discussion the faculty opted to have the comprehensive experience remain in the third year of the program. This decision was primarily based on the desire to have all students engage in the project as many of the 4th year students select to do international study, while the 5th year studios focus on individual special interests in topic studios and senior projects.

The program for the undergraduate comprehensive studios is now multifamily housing. The site changes from year to year, but is currently based on a real site in the Southern California region. Multifamily housing type is a staple in the southern California job market, which aids students that are seeking their first internship following their 3rd year of study. The schedule for the comprehensive project has been changed to a 2-quarter 20-week time frame. Faculty selected for the 2-quarter studio sequence are experienced licensed architects that have experience with multifamily housing projects ranging low-rise to high-rise projects. The winter quarter is the first quarter of the sequence where students are introduced to a range of housing typologies in lecture and through case studies. Standards for housing including room sizes and organizations are discussed in parallel with ADA requirements for accessible unit design. The site selected for the students is urban and in a jurisdiction that has a clear set of design guidelines and detailed zoning codes. Students are introduced to the process of making site assessments that lead to a site entitlement for the project property. This assessment includes density calculation, buildable area, setbacks and height restrictions. The students are also introduced to California State Inclusionary housing statutes that provide density bonuses and development incentives for projects that provide for low-income housing units to be integrated to the project. Most communities see inclusionary housing as an essential part of reducing the continued gentrification of existing neighborhoods and historic housing stock. Each student develops a program and narrative for the site that addresses a specific housing market. Some students choose to do family oriented units of larger size while other students seek to put the maximum number of units on the site of reduced unit footage in an attempt to provide the inclusionary housing in a mix of unit sizes. The program a student develops must be justified to the market and permitted density that one would experience in a real project.

The first quarter focuses on schematic design and addresses site orientation for energy use, site access based on recognition of public and private spaces, vehicular access and clearly demonstrating ADA units and site access for the disabled. All students are required to show the required ADA access from sidewalk to unit and from parking to unit via an accessible route. Each housing project must include a minimum of one fully accessible unit at grade and when two-story walk up units are provided the accessible level of the unit must comply for kitchen, bathroom and a sleeping area per ADA guidelines. Open space and linkages between interior and exterior spaces are emphasized as a common theme for housing in the region. Repetition of unit typology is not required however it is encouraged to keep the projects aimed at reality of production housing types. Building systems are open however the use of wood construction over a concrete podium or subterranean parking is recommended. These systems are very common in the region and there are many examples that the students may visit during the quarter. This also sets the students up with a curricular experience that is directly applicable to the job market in the area to help access internships. Both the graduate and undergraduate programs use the same site and draw upon the same resources. The only curricular difference is that the graduate studio instructor provides the lecture support directly to single studio of graduate students whereas the undergraduate students attend a collective lecture. We find that the graduate students at the second year are nearing the ability level of the undergraduates in the third year however direct supervision and a lower student to faculty ratio fosters greater opportunities for focused discussion within the graduate section. Students have 10 contact hours in studio each week and 1-2 hours of lecture/field trip each week. Projects are developed to a point between schematic design and design development and are presented to an invited jury of local Architects that are engaged in housing practices at end of the 10-week quarter.

The second quarter of the comprehensive studio is unique throughout the student curriculum as the students are enrolled in a series of classes that all relate to a singular learning outcome. For most students this consumes their entire schedule in the spring quarter. The design Development Housing design studio is the hub for the effort and the design instructor's specific role is that of helping the students to coordinate and synthesize the information that is provided in the related courses. To ensure continuity the instructors for ARC 303L are the same instructors that each student had in the winter ARC 302L quarter during program development and design. The goal is not to have the student frustrated by a new faculty member that may attempt to make significant changes rather than support advancing the project. During the first quarter of design in spring quarter students make adjustments to their projects based on comments from the ARC302L final jury and they are also directed to simplify forms and structures to better fit the desired learning outcomes for the development and documentation effort. Students in ARC 303L are concurrently enrolled in ARC 342/A Building Construction II focused specifically on the preparation of design development and construction documents. The central learning outcome for the class is a coordinated set of documents that organizes the quarter's effort in a package that simulates office practices in document preparation with CAD standards and nomenclature. The package is typically developed utilizing BIM software and related exercises are incorporated in the drawing set. Specific exercises include the development of vertical circulation systems and detailed wall sections focused on code issues and waterproofing detailing vertically through the building.

The second concurrent course that the students take is ARC 303 Codes taught by a local professional codes consultant. The course covers an overall understanding of codes and specifically focuses on the development of code as is applied to housing and the inclusion of code analysis and documentation for the project. Code compliance for fire resistive construction, area separations and allowable areas are part of the code exercises along with the development of code related sheets for inclusion in the project drawing set. The final concurrent class is ARC 472/A Building Integration. Responsibility for ARC 472/A is shared by two faculty members and covers the integration of both structures and mechanical, electrical and plumbing systems. The ARC 472/A faculty designed the course to simulate how an architect would engage professional consultants. The structures consultant covers preliminary load tracing exercise for wood structures, which is followed by load calculations and framing plans for each level of the project. Lateral systems are discussed and students must document how lateral forces are transferred to the ground, and calculate footing sizes based on a presumed bearing capacity for the property soil. Students do heat gain analysis for the project using computer model simulations. They also develop an understanding of U-factors for various assemblies and building components in order to do a preliminary sizing for an HVAC package unit to serve each unit. Students must also locate the HVAC units and

provide drawings showing how these lead to external condensers and heat pumps. Students then make preliminary equipment selections based on real products. HVAC plans are developed that show how air distribution relates to building framing and students must propose soffits and shafts to accommodate their proposed systems. Students perform day-lighting analysis to show how their typical unit performs and then develop lighting plans and electrical layouts for typical units including bathrooms and kitchen appliances. Students project overall service loads and demonstrate where electrical service is brought to the site and metered to the individual units. Roof plans demonstrate slope and locations for roof drains along with overflow options. Downspouts are coordinated through the stacked unit plans and checked for slope for sheet flow on site or by subterranean piping to the invert elevations of the storm drain in the adjacent streets. Plumbing fixtures are selected and water use is calculated. Water supply lines, water heating systems and waste systems are developed in the third dimension for a typical unit stack and the waste lines slope is carried out to the sewer invert elevation at the adjacent street. Venting is coordinated and taken to the roof.

The design studio becomes the point of synthesis where the co-requisite and concurrent course assignments are integrated into the design. Studio instructors act as advisors and also help the student to schedule their efforts to resolve the sequence of integration. Studio instructors work with students to translate the schematic elevations into larger scaled design drawings and to help students coordinate wall sections and details to the desired aesthetic expression. Students review and revise the layout and development of the subterranean parking for the project to address water infiltration, electrical and gas metering along with parking ramp slopes and subsurface drainage to sump pumps and state required water retention and filtration. The final package is a set of 24"x 36" design development documents that document the project as well as the learning outcomes from each of the concurrent class exercises. The feedback that we have had from the local profession has been very complimentary and students have found that this comprehensive housing project package has been a great asset in securing an internship position in the summer following their 3rd year. We are also working towards integrating the ARC 471/A Professional Practice course that students take in their 4th year to these efforts. The plan is to have students utilize the multi-family housing project as a source for doing a project statement of qualifications, a preliminary cost estimate, a fee proposal, and a work plan.

GRADUATE PROGRAM

Summary: The graduate comprehensive experience was kept in the 2nd year of the 3-year master's program within 505/505L and 506/506L for similar scheduling and relation to other curricular content.

The Graduate curriculum follows a similar course of study as the undergraduate program. Students are concurrently enrolled in the 591 codes class that parallels the undergraduate codes course along with ARC 342/A courses where building systems and project documentation are introduced. Instead of taking the ARC 472/A courses the graduates take studio lecture courses that cover the Structural and HVAC, Plumbing and Electrical systems integration into the set of documents. The smaller size of the graduate studios and lecture (of 12-14 students) has facilitated for graduate students to have field trips to construction sites where the instructor has been able to provide more direct lectures and demonstrations of integrated building systems. The graduate instructor has emphasized the CSI format for comprehending and documenting materials and assembly's with outline specifications. The deliverable product and learning outcomes for the studios are similar to that of the undergraduate program except that graduate instructors require that all housing units be fully accessible.

- **Strategic Planning**

2014 Visiting Team Comments: As stated in the APR and found in discussions with faculty and administration, the program is proactive through faculty meetings and the gathering of timely and pertinent data. However, the budget issues in the state linked with the high demand for the program and the planned shift in the university curricular organization from the quarter system to the semester system place create uncertainties of outlook and timing, adding to what is already a challenging process to strategically plan for the future.

California Polytechnic University, Pomona 2016 Response: [Click here to enter text.](#)

The Department addresses long-term issues such as curricular development, admissions targets, budget constraints, faculty recruitment, and changes to our facilities in several formats: 1) bi-monthly faculty meetings with tenured and tenure-track faculty, staff and student leadership, 2) bi-monthly curriculum meeting with the curriculum committee made up of full-time faculty representing each area of the curriculum, 3) yearly department wide meetings with full-time and part-time faculty, staff and student leadership, and 4) yearly retreats with tenured and tenure-track faculty and staff.

The Department's strategic planning efforts, developed collaboratively by the full-time faculty, has been quite active since our last NAAB accreditation visit given the planned change to semesters taking effect in fall 2018 and given our plans for increased admissions predicated on building new studio space.

Since our accreditation visit the department has held yearly 2-day off-site retreats with all tenure and tenure-track faculty. These retreats were used to discuss long-term plans and semester conversion. In addition to these retreats the faculty met approximately every two weeks starting in fall 2014 until fall 2016 to plan and write the curriculum and expanded course outlines for semester conversion. The semester conversion process required us to carefully consider our current curriculum and determine the best way to translate what we do in quarters to semesters. This process also required us to rewrite expanded course outlines (ECOs) for all of our courses. While we were careful to retain the content and structure of our current accredited program, we were able to refine our courses to better meet the 2014 conditions. In rewriting all the ECOs we determined three measures for student outcomes for each course: 1) Department expected outcomes, 2) Outcomes mapped to NAAB's Student Performance Criteria, and 3) Outcomes mapped to NCARB's ARE criteria. This was reviewed by curriculum committees for the department and the college, and by the university semester conversion committee.

The following is an example of how we defined student outcomes for the Second Year Design I Studio Course for semester conversion (this is typical of all architecture courses):

ARC 2011 - Second Year Design I (3 units)

General Objective

To understand the fundamental concepts necessary to design responsive buildings with a minimum environmental impact. The laboratory will guide the student through the research, analysis, and design phases of an architectural project.

At the end of the course students will have:

1. An understanding of basic concepts and tools that will enable them to design with the environment.
2. An understanding of basic concepts and tools that will enable them to design buildings adapted to site and climate and that use little water and energy.
3. An understanding of the impact of site, solar and wind orientation, building massing, construction methods, and material choices on building function in energy use.

Students will demonstrate ability in the following areas as defined by NAAB:

Critical Thinking and Representation:

1. Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
2. Investigative Skills and Applied Research: Ability to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.
3. Architectural Design Skills: Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.

4. Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices regarding the incorporation of such principles into architecture and urban design projects.

Students will demonstrate ability in the following areas as defined in the ARE Objectives:

Environmental Conditions & Context

1. Determine location of building and site improvements based on site analysis
2. Determine sustainable principles to apply to design
3. Determine impact of neighborhood context on the project design

Codes & Regulations

1. Apply zoning and environmental regulations to site and building design
2. Apply building codes to building design

Project Integration of Program & Systems

1. Determine building configuration
2. Integrate environmental and contextual conditions in the project design

The department of architecture's semester curricula for the B.Arch and M.Arch programs were completed in fall of 2015 and were approved in fall of 2016. The majority of our semester courses have also been approved following college and university review. We expect the approval process to be completed by winter 2017. The appendix to this document includes an outline of the curricula for both programs.

In addition to our strategic planning work for semester conversion, the department has also discussed other long-term goals, including:

- Our growth potential for the program over the next 10 years
- Our current strengths and weaknesses based on faculty expertise
- Ways to adjust our teaching and courses to address changes in the profession and NAAB
- Ways to better engage the profession and our alums
- Ways to empower faculty to lead certain efforts within the department
- Ways to foment a shared vision for the program and to share these with university and the larger architectural community
- Determining our three greatest short-term and long-term goals, and ensuring these get met

We are very optimistic about the outlook for the architecture program at Cal Poly Pomona. We have been able to grow our program and expand our facilities. We have three new Tenure-Track Faculty. We have improved our standing in national rankings by DesignIntelligence (both in the graduate and undergraduate ranking). We are attracting extremely high achieving students all of which have GPAs over 3.5. We are still one of the most diverse architecture programs in the country. There is a very high level of camaraderie in the department and high engagement in shared governance by faculty, students, and staff. We have improved our outreach to firms and have created a yearly publication of student work. We have received a number of donations to support new equipment for the Fabrication Lab and to support our topic studios in order to enable student travel and to help students defer the cost of models and printing. We have engaged the architectural design firm LPA, with approval from the university, to do a feasibility study to build a new 20,000sf studio facility adjacent to our large studio space. This study will be completed in January 2017 to be followed by a fundraising effort to secure funds for its construction.

c. Changes or Planned Changes in the Program

Please report such changes as the following: faculty retirement/succession planning; administration changes (dean, department chair, provost); changes in enrollment (increases, decreases, new external pressures); new opportunities for collaboration; changes in financial resources (increases, decreases, external pressures); significant changes in educational approach or philosophy; changes in physical resources (e.g., deferred maintenance, new building planned, cancellation of plans for new building).

California Polytechnic University, Pomona 2016 update: [Click here to enter text.](#)

Faculty retirement/succession planning:

Prof. Denise Lawrence will retire in winter 2017.

Administration changes:

The department will transition to a new chair during the 2016-17 academic year. The faculty elected Associate Chair George Proctor to assume the position of Chair starting on January 1, 2017. Sarah Lorenzen, the current Department Chair, will assume the role of Associate Chair for the remainder of the 2016-17 academic year. The department informally seeks to use this model to ensure that the transition from one chair to the next occurs with minimal disruption.

Since the Team visit in 2013, the University also has a new President Dr. Soraya M. Coley and Provost, Dr. Sylvia A. Alva. The new President and Provost have met with the department and have thus far been supportive of our mission and status within the university.

Changes in enrollment:

The department is projected to grow 20% over the next 5-7 years to absorb some of the market demand for students seeking a professional degree in architecture. The program typically receives between 15-24 highly qualified applications for every student we admit. The department took in 154 freshmen in 2016-17 and will be evaluating the outcomes and attrition from the first year of this cohort to determine what adjustments in admissions will need to be made, if any, in subsequent years.

New opportunities for collaboration:

The program continues to offer studios in collaboration with the departments of Engineering and Landscape Architecture. Additionally external funding is providing support for the Tectonic Graduate Studio and the following upper division studios: the A/E Studio, the Education Studio, the Disney Studio, and the Healthcare Studio, where the collaboration comes in part from the participation of professional expertise in studio, site visits to projects of a similar program finished or under construction, and visits to professional offices for reviews and presentations.

Changes in financial resources:

The university has made some adjustment to its accounting procedures and the campus budget has been tightened for the 2016-17 academic year. In conjunction with this, the university is placing greater emphasis on resources for retention and shortening the time to graduate. Of course, with the 5-year cohort model, the B.Arch is inherently at odds with a push for completion in 4 years or less. That being said, the time to graduation for the CPP B.Arch still outperforms most of the other programs on campus—thanks in large part to the caliber of our students and the cohort nature of the program.

Significant changes in educational approach or philosophy:

At this time we do not anticipate any significant alteration in our approach to teaching or our philosophy of learn-by-doing while providing access to the profession for a broad demographic.

Changes in physical resources:

The Department is working towards an expansion of its physical resources to accommodate the projected growth of 20% over the next 5-7 years. In the fall of 2016 the department is in the midst of a programming exercise with the University Facilities Department and LPA, Irvine, a multidisciplinary design firm. LPA will provide a final report in January 2017, which will be used to initiate a capital campaign for a new building comparable and adjacent to our existing 20,000sf studio facility. The new building will also make possible the consolidation of the architecture program by adding faculty and staff offices at the same location.

Revised Curricula (FUTURE curricula for Fall 2018):

The attached curricula for the B.Arch and M.Arch curricula will be implemented in Fall 2018, when the university switches to a semester system. The first page of each curriculum shows the previous quarter course numbers and how these have been adapted to a semester course. This sheet also shows whether the semester course is New, Revised, or Converted. With the exception of one new General Elective

course (ARC 1020/1022A), which is recommended but not required, and one new core course focused on Design Development (ARC 4400/4402A), all courses in the semester system are revisions of the current quarter system courses. For example the three-quarter second-year studio sequence ARC 201L, ARC 202L and ARC 203L have been revised to fit into the two-semester sequence ARC 2011L and ARC 2021L. Content covered in the three 10-week quarters will be in the future covered in two 15-week semesters. The new Design Development Lecture and Activity (ARC 4400/4402A), will be a combination of the quarter-long ARC 472/A Design Integration course and the quarter-long Arc 303L Design Development Studio course, and will take place in the fall of 4th year based on the work produced in the spring semester 3rd year Comprehensive Housing Studio (ARC 3021L). The graduate program will have a new Design Development course (ARC 4610) based on the graduate comprehensive housing studio (ARC 5041L), similar to the undergrads.

d. Summary of Activities in Response to Changes in the NAAB Conditions [2014 NAAB Conditions](#)

California Polytechnic University, Pomona 2016 update: [Click here to enter text.](#)

I.1.4 Defining Perspectives (5 new perspectives of 2014 conditions)

The perspectives offer programs the opportunity to define the means and methods most appropriate to their mission, history, and pedagogy to prepare students with a set of core values that are essential and fundamental to the practice of architecture. These values are held as perspectives instead of SPC, as they must transcend any one course and must be over-arching across the program.

A. Collaboration and Leadership. The program must describe its culture for successful individual and team dynamics, collaborative experiences and opportunities for leadership roles.

Collaboration is embedded in the structure of our curriculum for both the undergraduate and graduate program. Foundation studios (1st, 2nd and 3rd year) and senior project involve close collaboration between design faculty as all studio sections in these years work off a common syllabus. Studios faculty also work closely with lecture faculty to ensure common objectives and consistency of results in the design work. Both the grad and undergrad program engage students in team projects, at least once per quarter, to encourage students to learn about dialogue to accomplish common goals, conflict resolution, effective communication and interpersonal skills.

The Department of Architecture is part of the College of Environmental design and engages in extensive collaborations with the departments of landscape architecture and urban and regional planning through interdisciplinary design studios. Since the last visit, we continue interdisciplinary collaborations in the Disney studio with Landscape Architecture; the ARC 403 Urban Design studio with Landscape Architecture; two A/E Studios with the Engineering; and the ENV China studio with both Landscape Architecture and Urban and Regional Planning; the latter with the added component of collaboration with students, faculty and professionals in China.

The setting of southern California among other factors, yield a diverse cultural and gender balanced classroom in which students develop core values of collaboration with diverse publics, interpersonal skills, and cultural awareness and sensitivity. We continue to offer extensive options for study abroad for our students to instill international awareness and global competence; the successful Neutra VDL House Docents ARC 499 course where students study the house owned by Cal Poly Pomona to then apply their knowledge in leading public tours of the house, helping them develop interpersonal skills, leadership, and advocacy. We also continue to be among the largest AIAS chapters in the country showing student engagement and leadership as well as strong collegial culture. Our AIAS chapter continues to organize extensive events throughout the year both on and off campus to exemplify student leadership in our program culture. The AIAS extensively collaborates with faculty in addressing issues and organizing events in the department placing their leadership at the table of bi-monthly faculty meetings. Since the last accreditation visit, the AIAS has collaborated extensively with the Chair and faculty to formulate and disseminate the studio culture policy. Student leadership and participation is also continuing in the ENV Council showing engagement in college and university student government.

B. Design. The program must describe its approach to developing graduates with an understanding of design as a multidimensional process involving problem resolution and the discovery of new opportunities that will create value.

Our department is committed to educating students to graduate with the skillset to succeed in the profession. Design is at the center of our curriculum and since the last accreditation visit we have more closely articulated the relationship between design and lecture courses to align the lessons of one course to be applicable to the production of a more informed and multi-dimensional design studio project.

Since accreditation we have restructured the comprehensive studio in both programs to be a more in depth study in order execute more developed and comprehensive design solutions. Prior, the challenge of the quarter system posed a stringent time frame for such complex and multi-dimensional lessons. We previously taught a comprehensive studio in the undergraduate ARC 303L studio and the graduate ARC 505L studio. The new structure is ARC 302L and 303L, and ARC 505L and ARC 506L. The change allows students time to deal with the social and economic issues of design, repercussion of design decisions, creative design processes, and understanding and implementation of complex technical methods into an integrated project. The results have proven successful bringing the projects to a level of construction documents. In the new format, we have structured the same faculty to teach both design courses collaborating with structures and system integration faculty. This change has proven to yield an impressive portfolio component that the students convey has assisted them in excelling in internship interviews and job applications. The process allows students to digest lessons and perform better implementation as well as see value in their work directly tied to the profession. We are also continuing to explore the structure of the senior and thesis studios to be a stronger multi-dimensional process. Since accreditation we have structured ARC 473, The Architect in the Development Process (required of undergrads prior to entering senior project, and optional to grads) to provide preparation and understanding of the complex dimensions of the profession and building design processes.

C. Professional Opportunity. The program must describe its approach for educating students on the breadth of professional opportunities and career paths, including the transition to internship and licensure.

Our students are required to complete 500 hours of internship before graduation, and are required to track the hours by starting their NCARB Council Record. We are a Polytechnic institution and the professional perspective is embedded in the culture of our program through coursework and extensive professional exposure outside the classroom. We continue to have studios that are direct collaborations with the profession, as well as actively have professionals in the design studios as critics. For those students that may consider non-traditional settings, we are currently developing new courses as we prepare to transition into semesters, these are, The Architect and the Development Process, Managing a Design Firm, Institutional Environments, and Health Care Planning and Design. Additionally we are continuing to offer and develop the Health Care Design concentration.

We have an established lecture series open to the public that brings professionals to our program every quarter on a weekly basis making for an average of 24 professional lectures per academic year. Since accreditation, we also have moved the location of our lecture to the architecture studios which has furthered the success of the lectures tremendously making these professional lectures an integral aspect of the studio culture. In addition, through maintaining strong ties with alumni, we have been able continue with their support to award the Neutra Award for Professional Excellence, which has served to recognize lifetime professional achievement. The award has allowed us to bring major international figures to Cal Poly Pomona. Since the last accreditation visit, we have brought Michael Rotondi (2014), Enrique Norten (2015) and Carmen Pinos (2016) to receive the Neutra Award, to give a public lecture, and to engage in discussion with our students and faculty.

D. Stewardship of the Environment. The program must describe its approach to developing graduates who are prepared to both understand and take responsibility for stewardship of the environment and natural resources.

The program has a well-established culture and academic structure in sustainability primarily seen in the Sustainability Concentration that has an extensive list of both required and elective courses and a consistent number of students engaging in the concentration. The values of stewardship of the environment are overarching themes implemented throughout the program beginning in the first year with a new required first-year course, ARC 299, where students are introduced to the concept of environmental stewardship through guest lectures and field trips. In the second year structure we continue to incorporate sustainability lectures and design concepts into the design studio. Our newly structured comprehensive studio takes place in their 3rd year where environmental stewardship is refined beyond understanding to methods implementation. The Lyle Center of Regenerative Studies under the umbrella of the College of Environmental Design continues to serve our students and faculty in research and implementation. Our students engage in both directed and self-initiated submissions to sustainability competitions and are participants in conferences. This July 2016, our department co-organized the Passive Low Energy Architecture Conference (PLEA) in Los Angeles, a continued tradition in which faculty and students lead the effort to organize a major international event.

E. Community and Social Responsibility. The program must describe its approach to developing graduates who are prepared to be active, engaged citizens able to understand what it means to be professional members of society and to act ethically on that understanding.

The philosophy of Learn-by-Doing is well established in the academic culture at Cal Poly Pomona and resources and support are available to faculty from the Office of Community Service Learning. The architecture program has a history of courses that directly serve the public by collaborating with community and professional entities to reinforce architecture as a service profession. Since the last visit we have maintained and developed the role of the Neutra VDL House in the architecture community and the general public by teaching students about the responsibility of preserving this historic architectural property. Since the last accreditation visit, we have hosted the exhibition *Competing Utopias*, an experimental installation of cold war modern design; an exhibition on the work of landscape Architect Luis Callejas, and multiple panel discussions and presentations by emerging professionals in collaboration with the Los Angeles Forum for Architecture and Urban Design. In addition, we have hosted annual alumni receptions to connect with our alumni community, and fundraising events to support arts programming in public schools with *Barnsdale Arts* and *Big City Forum*.

The faculty actively seek opportunities and teach studios and seminars with service components at the local and international level. Some examples are collaborations in Tijuana and Tecate in Mexico where students participate in courses designing for a community center for local Mexican communities; and the ENV China program, an interdisciplinary collaboration taught in Beijing researching and designing for local historic communities facing demolition by fast faced development. Since the last accreditation visit, we added a new required first year seminar, ARC 299/A that introduces students at the earliest stage of their education to different aspects of the profession, including social responsibility and the role of architects in community engagement. In our current preparation for semester conversation, we have also developed new elective courses called Community Practicum and Social Responsibility of Architects.

The culture of community engagement and social responsibility is evident in community projects done outside of the classroom as well. In 2015, our students initiated a design build project for a local community in Ontario, the Huerta del Valle Community Farm and Gardens. In this project, students designed a community center and educational spaces, led a massive online awareness campaign leading to the dissemination of the project in major architectural online circles and local newspapers, and concurrently led a successful Go-Fund me campaign to fund the construction of the project. The project is currently obtaining building permits.

Realm C for Integrative Design. The 2014 conditions have established a separate realm, Real C, for Integrative Design.

We have made substantial changes to the integrative design component of our program. Please reference Comprehensive Design section above.

II.4.6. Admissions and Advising (new condition in public information)

The program must publicly document all policies and procedures that govern how applicants to the accredited program are evaluated for admission. These procedures must include first-time, first-year students as well as transfers within and from outside the institution.

Admission to our program is governed by procedures and standards of the university based on the program being an impacted program. Policies for admission are listed on the department website for both undergraduate first time freshman, transfer students, international students, change of majors, and graduate students. All admission information, applications and procedures are publicly maintained in the department's office. Documents include students' applications, forms, portfolios submitted for placement, admissions decisions, evaluation forms and requirements check lists.

II.4.7 Student Financial Information (new condition in public information)

The program must demonstrate that students have access to information and advice for making decisions regarding financial aid. The program must demonstrate that students have access to an initial estimate for all tuition, fees, books, general supplies, and specialized materials that may be required during the full course of study for completing the NAAB-accredited degree program.

The registration fees are posted on the university website and are accessible by all prospective students. We have posted on the department website, the list of items that students should expect to use for their studies in our program. This information is also made available to accepted students during orientation prior to the beginning of their studies in our program. Since the last accreditation visit, we have been preparing for semester conversion. In the process, we have updated our expanded course outlines to include a description of the materials needed by each student specifically in each course.

e. Appendix (include revised curricula, syllabi, and one-page CVs or bios of new administrators and faculty members; syllabi should reference which NAAB SPC a course addresses)

California Polytechnic University, Pomona 2016 update: [Click here to enter text.](#)

Appendix 1. Studio Culture Policy (Revised)

Appendix 2. New and Revised Syllabi

The following syllabi, and included in this report, show the ways in which we have addressed "Areas Not Met" or "Areas of Concern" as described in our Interim Progress Report.

ARC 299 40 Ideas That Changed Architecture (New)
ARC 201/L, ARC 202/L, & ARC 203/L Second Year Design 1, 2 & 3 (Revised)
ARC 302/L & ARC 303/L Third Year Design 2 & 3 (Revised)
ARC 303 / 591 Codes (Revised)
ARC 341/A & ARC 342/A Building Construction 1 & 2 (Revised)
ARC 406/L & 407/L Senior Project (Revised)
ARC 464/A American Architecture (Revised)
ARC 472/A Building Integration (Revised)
ARC 505/L and 506/L – Graduate Housing Studio I & II (Revised)

Appendix 3. One-page CVs for new administrators and faculty members:

George Proctor, Associate Chair and Chair starting in January 2018
Robert Alexander, Tenure-Track Associate Professor
Marc Schultiz, Tenure-Track Associate Professor
Katrin Terstegen, Tenure-Track Associate Professor

Appendix 4. Proposed Semester Curriculum (to be implemented in Fall 2018)

Undergraduate Architecture Program 5-year B.Arch
Graduate Architecture Program 3-year M.Arch I