CPI Improving PLO Report (AY22-23)

Name of the program_Bachelor in Architecture (B.Arch)

Expected Date of Submission 6/30/2023

Department Chair or Director: Giovanni Santamaria, Chair

NYIT's CPI process is implemented to meet MSCHE Standard V: Educational Effectiveness Assessment: Assessment of student learning and achievement demonstrates that the institution's students have accomplished educational goals consistent with their program of study, degree level, the institution's mission, and appropriate expectations for institutions of higher education.

All degree program's PLO assessment plan (2022-2025) are posted through the link:

http://www.nyit.edu/planning/academic_assessment_plans_reports.

This is a report of its implementation for year 2022-2023. The report should address the following points:

I. The Annual Program Learning Outcomes (PLOs) Assessment should include the followings.

1. PLO (Program Learning Outcomes) assessed. list the PLOs that have been assessed in AY 22-23 based on your three-year plan (AY22_25)

The focus for the AY 2022-23 was on assessing the Program Outcome 1, 7, 9, 13, 14.

- PLO1: Students completing the B.Arch program will be able to identify a range of career options that best match their aspiration, abilities, goals, and values as learned in this program;
 - > Arch 481- Professional Practice (FA 22-SS 23)
- PLO7: Students completing the B.Arch program will have embarked on a process of life-long learning that prepares them to identify, express, prioritize, value, and operate to guarantee a creative and professional participation to repair the environment and bring positive outcomes for society;
 - AAID 160- Intro to History-Theory, and Criticism in Architecture (FA 22)
 - ➤ Arch 161- Survey History of Architecture I (SP 23)
 - Arch 362- City Planning (FA 22- SP 23)

- PLO9: Students completing the B.Arch program will be able to identify, document, analyze, assess, model, illustrate, and critique issues and parameters that impact the health and safety of our built environments;
 - > Arch 324- Environmental Systems I (FA 22)
 - > Arch 325- Environmental Systems II (SP 23)
 - ➤ Arch 272- Environmental Site Planning (FA 22-SP 23)
- PLO13: Students completing the B.Arch program will be able to analyze, prioritize, compare, evaluate, and make decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions;
 - > Arch 302- Architectural Design IV (SP 23)
 - > Arch 501- Architectural Design VII (FA 22)
 - > Arch 502- Architectural Design VIII (SP 23)
- PLO14: Students completing the B.Arch program will be able to correlate, categorize, select, developing the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.
 - ➤ Arch 301- Architectural Design III (FA 22)
 - > Arch 401- Architectural Design V (FA 22)
- 2. METHOD: Describe the method of assessment and attach measurement instruments (e.g., rubric, exam items, scoring guide for a particular task, supervisor evaluation form, survey instrument, and other assessment tools).
 - PLO1: Students completing the B.Arch program will be able to identify a range of career options that best match their aspiration, abilities, goals, and values as learned in this program;

Arch 481 (FA 22, SP 23)

Direct methods of assessment_ course assignment; capstone course work; standardized tests; rubrics shared with the invited guest reviewers Indirect Methods of Assessment_ student survey; interview; alumni survey; students' reflection

Grade Rubric:

40% Quizzes (8-10); 50% Homework (8 letters, essays, and other writing responses); 10% Final Exam (Multiple choice exam)

- PLO7: Students completing the B.Arch program will have embarked on a process of life-long learning that prepares them to identify, express, prioritize, value, and operate to guarantee a creative and professional participation to repair the environment and bring positive outcomes for society;

AAID 160 (FA 22)

Direct methods of assessment_ course assignment; quizzes; papers and presentations

Indirect Methods of Assessment student survey; students' reflection

Grade Rubric:

Weekly travelogues - 100 points (10 weeks); Midterm and final travelogues - 50 points (25 + 25); Writing assignment (2) - 100 points (50 midterm, 50 final); Presentation (3) - 30 points (10 each); Attendance and Participation - 20 points

Arch 161 (SP 23)

Direct methods of assessment_ course assignment; quizzes; papers

Indirect Methods of Assessment_ student survey; students' reflection

Grade Rubric:

30% Weekly quizzes; 30% Writing assignments; 30% Diagramming Exercises; 10% Attendance and Participation

Arch 362 (SP 23)

Direct methods of assessment_ course assignment; quizzes; presentations

Indirect Methods of Assessment_ student survey; students' reflection

Grade Rubric:

10% Class participation; 30% (3 x 10%) Quizzes; 20% (2 x 10%) Presentation Groups; 10% (2 x 5%) Response Groups; 30% Glossary Submissions; 10% Outline; 20% Final Glossary submission

- PLO9: Students completing the B.Arch program will be able to identify, document, analyze, assess, model, illustrate, and critique issues and parameters that impact the health and safety of our built environments;

Arch 324 (FA 22)

Direct methods of assessment_ course assignment; capstone course work;

Indirect Methods of Assessment_ student survey; interview; alumni survey; students' reflection

Grade Rubric:

65% Assignments; 20% Final Project Portfolio (a cohesive, well explained collection and further development of prior analyses); 10% Class Participation/ Attendance; 5% Adjustment factor to any evaluation based on the students' intensity of effort and commitment to the course. It can be assumed that a minimum effort on these assignments will result in a poor evaluation. Each student is required to keep detailed, graphic notes from class lectures and the readings.

Arch 325 (SP 23)

Direct methods of assessment_ course assignment; capstone course work;

Indirect Methods of Assessment student survey; interview; alumni survey; students' reflection

Grade Rubric:

77% Studio Assignments (11 total); 13% Final Project Portfolio (a cohesive, well explained collection of the prior analyses/ assembled project); 5% Class Participation/ Attendance; 5% Adjustment factor to any evaluation based on the students' intensity of effort and commitment to the course. It can be assumed that a minimum effort on these assignments will result in a poor evaluation. Each student is required to keep detailed, graphic notes from class lectures and the readings.

Arch 272 (FA 22- SP 23)

Direct methods of assessment_ course assignment; capstone course work; presentation

Indirect Methods of Assessment_ student survey; interview; alumni survey; students' reflection

Grade Rubric:

5% Project 1: Individual Zoning Analysis + Bulk Regulations (ZD-1); 20% Project 1: Team Urban Project + Site Pressure Justifications; 20% Project 2: Team Rural Project + Site Pressure Justifications; 20% Project 3: Team Analysis / Synthesis / Comparison (Urban + Rural); 10% Debate Assignment 1 with precedent examples / topical research; 10% Debate Assignment 2 with precedent examples / topical research; 5% Individual A.R.E. Assignments (2 problems: Site Design + Site Grading); 10% Participation, readings/discussion, attendance, site visits, timely completion of assignments, portfolio

- PLO13: Students completing the B.Arch program will be able to analyze, prioritize, compare, evaluate, and make decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions;

Arch 302 (SP 23)

Direct methods of assessment_ course assignment; capstone course work; portfolios; rubrics shared with the invited guest reviewers;

Indirect Methods of Assessment student survey; interview; alumni survey; students' reflection

Grade Rubric:

10% Charrette/Warmup Project; 10% Site and Precedent Research Presentations; 20% Midterm; 50% Final; 5% Participation; 5% Portfolio

Arch 501 (FA 22)

 $Direct\ methods\ of\ assessment_\ course\ assignment;\ capstone\ course\ work;\ final\ book;\ rubrics\ shared\ with\ the\ invited\ guest\ reviewers;$

Indirect Methods of Assessment_ student survey; alumni survey; students' reflection

Grade Rubric:

15% Exercise 01: Thematic Site Construction: Mapping the Past—Present—Future; 15% Exercise 02: Selected Precedent Study (from the selected list); 15% Exercise 03: Exquisite Corpse—Space/Event/Movement; 15% Participation; 40% Final "Animation" and "Book of Research" (EX1+EX2+EX3, Synthesis, animation. Exact submission details to be confirmed after mid-term)

Arch 502 (SP 23)

Direct methods of assessment_ course assignment; capstone course work; final book; rubrics shared with the invited guest reviewers; Indirect Methods of Assessment_ student survey; alumni survey; students' reflection

Grade Rubric:

1.5% 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. 5% Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design; 3. 5% Ability to gather, assess, record, and comparatively evaluate relevant information and performance to support conclusions related to a specific project or assignment; 4. 5% Ability to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects; 5. 5% Understanding of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors; 6.5% Understanding of the theoretical and applied research methodologies and practices used during the design process; 7.5% Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies; PC.5 10% Research and Innovation Understanding and participate in architectural research to test and evaluate innovations and the role of research and testing the design process; PC.6 10% Leadership and Collaboration Understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems; SC.5 20% Design Synthesis Develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions;

502 Final Design Projects to include: 1. A 5% clear and precise thesis question that use abstract ideas to interpret existing information. A project that considers diverse points of views with well-reasoned conclusions that teste alternative outcomes against relevant criteria and standards; 2. A 5% well resolved complex architectural project that demonstrates appropriate response to socio-political circumstances, site conditions, broad integration and consideration of environmental stewardship, technical competency, resolved accessibility, safety, environmental systems, structural systems, and building envelope systems.

Additional Curricular Values: 8. 3% Attendance + Lateness + Participation. /3 points; 9. Ability to complete projects on time; 10. 3% Student Initiative and development of project(s) and/or assignments; 11. 3% Ability to integrate new information during project development and/or assignments; 12. 3% Clear project narration, visual and verbal presentation skills; TOTAL 100%

- PLO14: Students completing the B.Arch program will be able to correlate, categorize, select, developing the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

Arch 301 (Fa 22)

Direct methods of assessment_ course assignment; capstone course work; portfolios; rubrics shared with the invited guest reviewers; Indirect Methods of Assessment student survey; students' reflection

Grade Rubric:

10% Charrette/Warmup Project; 10% Site and Precedent Research Presentations; 20% Midterm; 50% Final; 5% Participation; 5% Portfolio

Arch 401 (FA 22)

Direct methods of assessment_ course assignment; capstone course work; portfolios; rubrics shared with the invited guest reviewers; Indirect Methods of Assessment_ student survey; students' reflection.

Grade Rubric:

5% Study of Precedents and Understanding of the Site; 20% Structure Design; 20% Enclosure Design; 20% Systems Design; 20% Midterms and Finals; 10% Final Portfolio; 5% Participation.

3. ANALYSIS of the assessment results: provide criteria based disaggregate and aggregate data analysis.

In all of the classes (seminars and studios) indicated above and included into the first assessment period (FA 22- SP 23) each component determining the final grade was evaluated out of 100 (points or %). The grade assigned to the student's work was evaluated as follows:

Superior Work (A, A-): 90-100 Very Good Work (B+): 80-89 Satisfactory Work (B, B-): 70-79 Poor Work (C+, C, C-): 60-69

Failing (F): below 60

PLO1: Students completing the B.Arch program will be able to identify a range of career options that best match their aspiration, abilities, goals, and values as learned in this program;

Arch 481 (assignments collected from 20 students)

Superior Work: 35% Very Good Work: 40% Satisfactory Work: 20%

Poor Work: 5% Failing: 0%

PLO7: Students completing the B.Arch program will have embarked on a process of life-long learning that prepares them to identify, express,

prioritize, value, and operate to guarantee a creative and professional participation to repair the environment and bring positive outcomes for society;

AAID 160 (assignments collected from 30 students)

Superior Work: 50% Very Good Work: 27% Satisfactory Work: 20%

Poor Work: 3% Failing: 0%

Arch 161 (assignments collected from 36 students)

Superior Work: 46% Very Good Work: 20% Satisfactory Work: 26%

Poor Work: 6% Failing: 2%

Arch 362 (assignments collected from 12 students)

Superior Work: 44% Very Good Work: 55% Satisfactory Work: 1%

Poor Work: 0% Failing: 0%

PLO9: Students completing the B.Arch program will be able to identify, document, analyze, assess, model, illustrate, and critique issues and parameters that impact the health and safety of our built environments;

Arch 324 (assignments collected from 22 students)

Superior Work: 41% Very Good Work: 23% Satisfactory Work: 26%

Poor Work: 6% Failing: 4%

Arch 325 (assignments collected from 12 students)

Superior Work: 38% Very Good Work: 28% Satisfactory Work: 16%

Poor Work: 11%

Failing: 8%

Arch 272 (assignments collected from 34 students)

Superior Work: 29% Very Good Work: 60% Satisfactory Work: 9%

Poor Work: 2% Failing: 0%

PLO13: Students completing the B.Arch program will be able to analyze, prioritize, compare, evaluate, and make decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions;

Arch 302 (assignments collected from 32 students)

Superior Work: 50% Very Good Work: 36.5% Satisfactory Work: 9.5%

Poor Work: 6% Failing: 0%

Arch 501 (assignments collected from 52 students)

Superior Work: 36%

Very Good Work: 28% Satisfactory Work: 27%

Poor Work: 9% Failing: 0%

Arch 502 (assignments collected from 50 students)

Superior Work: 41% Very Good Work: 27% Satisfactory Work: 24%

Poor Work: 8% Failing: 0%

PLO14: Students completing the B.Arch program will be able to correlate, categorize, select, developing the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

Arch 301 (assignments collected from 35 students)

Superior Work: 40% Very Good Work: 27% Satisfactory Work: 22%

Poor Work: 10% Failing: 1%

Arch 401 (assignments collected from 12 students)

Superior Work: 48% Very Good Work: 24% Satisfactory Work: 20%

Poor Work: 7% Failing: 1%

- 4. INTERPRETATION: to what degree did students achieve the program learning outcomes based on your data analysis and expected learning outcomes?
 - We were very pleased with the results of PLO 1. These show evidence that the students within the program obtain the necessary knowledge and tools to be able to proceed and succeed in their professional careers being their work mostly evaluated very good or satisfactory. The faculty teaching this class confirm that skills such as professional ethical behaviors, management of processes and contracts that are crucial for the profession are successfully understood, metabolized, and applied by the students through assignments, and simulations. The active participation to presentation and conversations with experienced professionals invited during the class is also relevant for the students besides the exercises and papers.
 - We were pleased with the results of PLO 7. The few failings are due mostly to the inexperience of the students in managing and coordinating properly the amount of homework during the first semesters of their academic path. They then progressively develop a productive methodology of studying. In fact the percentage of Superior- Very Good- and Satisfactory work in the History-Theory sequence, proofs that the students are engaged and able to critically elaborate the contents of the courses. Interpreting the data, we also realized that more students are able to reach a Satisfactory level while the courses become more focused on specific topics and relate more to the work they produce in studio. We found very useful and easier to relate for students adopting a global and more diverse and inclusive perspective towards the history of architecture and design in terms of references, therefore we are strengthening it and be sure that papers and assignments are also open and performable to include the variety of communication and representation skills of each students.
 - We were pleased with the results of PLO 9. We are confident that the students are understanding the relevance of the environmental factors into the design processes and of their responsibility in understanding and learning strategies and approaches that foster sustainability as also outlined by the percentage of Superior and Very Good work. We also notice that there is a higher percentage of Poor work in the courses involved in this PLO, but we understand that often this comes from missing submission of some of the parts of the work that leads to the final grade, due to the complexity of it. We are the assessing this issue consolidating some of the assignments and better coordinating them with the work that simultaneously is produced in the studio class. This integration and horizontal coordination allows students to better understand their projects holistically and to address complexity in synergy, which is also a premise to their professional experiences.
 - We were pleased with the results of PLO 13. Even though we have from 6 to 9% Poor work, we also have very rare failures and a high percentage of Superior and Very Good work. We understand that the reason for the Poor work in the two studios

(Arch 501- Arch 502) could be also that these are self-directed by each student in terms of topic as it is also the proceeding of the work being this the final independent studio thesis. This has been historically a two semester studio, but since we noticed some lack of motivation and enthusiasm from the student side in developing the final part of the project in the second semester, we have changed the structure of the sequence of these classes in our degree map to two separate and individual studios with their own focus. Only the second of the two (Arch 502) will be dedicated to the final thesis studio, while the remaining credits go to a separate studio (Arch 501) and to a merely theoretical class in the fall semester (Arch 531) which would create the basis for the thesis studio. We think that this will reduce if not eliminate the percentage of Poor work. Considering the percentage of Superior work in the advanced theory seminar Arch 302, we will keep the experimental topical nature of this class working more on deliverable and assignments to be sure to reduce the percentage of Poor work.

- We were very pleased with the results of PLO 14. The high percentage of Superior and Very Good work make us confident that with some adjustments to the organization of the assignments and their complexity especially in Arch 401 and to the dynamics of the team work, especially in the case of Arch 301, we will be able to improve some of the Poor work. We are paying special attention to assess these classes in our curriculum to be sure that the understanding of the building systems and of the most advanced building technologies are fully understood by the students, since these are crucial for their professional growth and competitiveness.
- 5. CLOSE THE LOOP If the expected program learning outcomes were successfully met, describe how the program will keep or expand the good practices, if not, refine or create the next cycle of <u>PDSA</u>

The program met the criteria established and will keep self-assessing the quality of the work during and at the end of each semester. Coordination meetings with the coordinators and assessment meetings with all the faculty involved will proceed to guarantee the quality required from each class through the Fall 23 and Spring 24. A yearly revision of structure and contents of the syllabi is in place during the Summer 23 to be sure that elements of weakness are promptly addressed, while potentials and strengths are maintained and consolidated even through the needed updates and changes.

II. Brief Description of Faculty Engagement in the Current Annual Assessment Report:

All the faculty and coordinators are engaged through meetings and conversations in preparation, during and at the conclusion of each semester. Faculty are also involved in sharing and verifying that the rubrics defined by the coordinators for each course are complete, shared and discussed critically. These are also part of a dialogue among faculty of different but sequential or related

courses, to double check and coordinate vertical continuity across the semesters/years and horizontal consistency among interrelated courses. Special coordination meetings are also organized in preparation of the next NAAB visit and focused on the criteria outlined within it and following the new structure of it.

Last updated 4/14/23