

CPI PROGRAM LEARNING OUTCOMES

This plan provides the PLO assessment plan for AY 2022-2025

Name of the program: M.S. Architecture, Health and Design

Plan for AY 2024-2025, 2025-2026, 2026-2027,

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Dean's Signature:



To ensure NYIT's CPI process meeting 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. In this CPI report, each department is requested to create a three-year assessment/evaluation plan to improve student learning for each degree programs.

Program Learning Outcome Assessment Plan

1. PLO: All degree program's PLO assessments and plan (2023-2024) are posted through the link:
http://www.nyit.edu/planning/academic_assessment_plans_reports

M.S. Architecture, Health and Design, Program Learning Outcomes (PLOs):

A- Career Paths— understand emerging career paths and how to develop an agile, adaptive attitude and resilient mindset towards volatile future work environments and a range of available career opportunities in new job markets driven by health and design that utilize the acquired skills and knowledge.

PLO1: Students completing the M.S.AHD program will be able to identify a range of innovative and emerging career options that best match their aspiration, abilities, goals, and values as learned in this program.

- [ARCH 753 History and Theory of Design for Health \(FA23\)](#)

B- Design— understand the role of the design process in shaping the built environment and the methods by which design processes integrate multiple factors, in different settings and scales of development, from humans to buildings to cities to products.

PLO2: Students completing the M.S.AHD program will be able to deploy creative and critical thinking to develop human centered projects that account for intrinsic and extrinsic factors.

- [ARCH 701 Health and Design Studio 1 \(FA23\)](#)
- [ARCH 702 Health and Design Studio 2 \(SP24\)](#)

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- C- Ecological Knowledge and Responsibility**— holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, health eco-system, adaptation, and resilience principles in their work and advocacy activities.
PLO3: Students completing the M.S.AHD program will be able to identify, classify, review, select, translate, and act upon natural and ecological processes that interact with the new and existing built environments, to implement sustainable development strategies leveraging environmental and human metrics.
➤ ARCH 757 Materials (FA23)
- D- History and Theory**— understand health in design, architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.
PLO. 4: Students completing the M.S.AHD program will be able to identify, select, classify, summarize, recognize, and translate, theories and historical examples of health and care framed in their local contexts and their mutual effects and impacts across social, cultural, and geographical landscapes.
➤ ARCH 753 History and Theory of Design for Health (FA23)
- E- Research and Innovation**— engage and participate in design and health research to test and evaluate innovations in the field.
PLO.5: Students completing the M.S.AHD program will be able to assess information, allowing them to anticipate, operate, deduce, produce, analyze, assemble, estimate, examine, and simulate strategies and methods to foster innovation through applied research and experimentation.
➤ ARCH 701 Health and Design Studio 1 (FA23)
➤ ARCH 702 Health and Design Studio 2 (SP24)
- F- 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.
PLO 6: Students completing the M.S.AHD program will be able to successfully operate, coordinate, negotiate, and lead participation in collaborative teams in the preparation, design, documentation and execution of purpose driven projects in the wider area of health and healthcare and for alternative forms of design practice.
➤ ARCH 752 Multidisciplinary Design (SP24)

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G- Learning and Teaching Culture— fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

PLO.7: Students completing the M.S.AHD program will have embarked on a process of life-long learning that prepares them to identify, express, prioritize and value aspects impacting health and devise ways to unlearn stuck practices and overcome established ways of seeing and mindsets.

➤ **ARCH 754 Body Mind and Built Environments (FA23)**

H- Social Equity and Inclusion— understanding of diverse cultural and social contexts and help students to translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

PLO.8: Students completing the M.S.AHD program will be able to recognize, understand, document, assess, and respond to the social, cultural, economic and political contexts in which they operate, locally and globally, to fulfill our commitments to inclusion, equity, and a more just and resilient future for all.

➤ **ARCH 701 Health and Design Studio 1 (FA23)**

➤ **ARCH 702 Health and Design Studio 2 (SP24)**

I- Health, Safety and Welfare in the Built Environment— understand the impact of the built environment on human health, safety, and welfare at multiple scales, from cities to buildings to products.

PLO9: Students completing the M.S.AHD 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. They actively engage with diverse communities, various scales of spaces and uses, analyze health and safety needs, lived experiences as well as workflow challenges in order to identify opportunities for innovation.

➤ **ARCH 755 Environmental Behavior and Design Intelligence (SP24)**

J- Professional Practice— understand professional ethics, emerging practices and policies influencing regulatory requirements, the fundamental tools and business processes relevant to design and health practice, and the forces influencing change from public health to healthcare.

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PLO 10: Students completing the M.S.AHD program will be able to articulate, communicate and integrate methods from the overlapping disciplines in the design of health and care spaces with ethically and socially responsible reasoning.

- **ARCH 754 Body Mind and Built Environments (FA23)**
- **ARCH 752 Multidisciplinary Design (SP24)**

K- Inclusive Design— understand design thinking tools and apply human centered methods to design for and with people.

PLO11: Students completing the M.S.AHD program will be able to critically think and communicate across domains, analyze latent relationships within quantitative data and qualitative information and evaluate any potential impacts to people and the eco-systems around them.

- **ARCH 754 Body Mind and Built Environments (FA23)**
- **ARCH 755 Environmental Behavior and Design Intelligence (SP24)**

L- Technical Knowledge— understand the established and emerging systems, their technologies and assemblies and the methods and criteria to assess those technologies against the design, economics, and performance objectives of projects, products or services.

PLO12: Students completing the M.S.AHD program will be able to identify, deploy, integrate, and implement the most advanced technical knowledge and up to date emerging systems to assess and improve performance of their projects and products consistently and coherently according to relevant standards and the user needs.

- **ARCH 756 Medical and Mobility Prototypes (SP24)**

M- Design Synthesis— develop the ability to make creative decisions within projects while demonstrating synthesis of user needs, regulatory requirements, local conditions including accessible design, and consideration of the measurable eco system impacts of their design decisions.

PLO13: Students completing the M.S.AHD program will be able to analyze, prioritize, compare, evaluate, and make decisions within projects, products or services while demonstrating synthesis of user requirements, regulatory requirements, local conditions, and accessible design, and consideration of the measurable impacts of their design decisions on environment and humans.

- **ARCH 701 Health and Design Studio 1 (FA23)**
- **ARCH 702 Health and Design Studio 2 (SP24)**

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N- Prototyping and Testing— understand design and its impact on health through innovation across domains from spatial quality, materials, technology and interactive design through sensing and feedback, testing relationships and affect between users, products and spaces.

PLO14: Students completing the M.S.AHD program will be able to evaluate and make decisions within projects, products or services, including the capability to apply standards to develop and evaluate prototypes and solve challenges through ideas and making thereby adhering to ethical, equitable, regulatory and resilient environmental decisions.

- **ARCH 756 Medical and Mobility Prototypes (SP24)**
- **ARCH 757 Materials (FA23)**

2. Matrix: provide/update the assessment matrix that indicate which learning outcomes are assessed in which set of courses. The original matrix is here: http://www.nyit.edu/planning/academic_assessment_plans_reports

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| PROGRAM CRITERIA MATRIX | | New York Institute of Technology | | CORE COURSES | | | | | | | |
|--|--|----------------------------------|--|------------------|---------------------------------|-----------|---------------------------------------|------------------|--------------------------|--|---------------------------------|
| Master of Science in Architecture, Health and Design | | Preparatory Education | | Fall | | Spring | | | | | |
| | | | | ARCH 701C | ARCH 702C | ARCH 754 | ARCH 752 | ARCH 755 | ARCH 756 | | |
| Primary Evidence Source | | | | M.S.AHD Studio 1 | Body Mind and Built Environment | Materials | History & Theory of Design for Health | M.S.AHD Studio 2 | Multidisciplinary Design | Environmental Behavior & Design Intelligence | Medical and Mobility Prototypes |
| Secondary Evidence Source | | | | | | | | | | | |
| Shared Values | | | | | | | | | | | |
| Design | | | | | | | | | | | |
| Env. Stewardship & Professional Respon. | | | | | | | | | | | |
| Equity, Diversity & Inclusion | | | | | | | | | | | |
| Knowledge & Innovation | | | | | | | | | | | |
| Leadership, Collab. & Community Engagement. | | | | | | | | | | | |
| Lifelong Learning | | | | | | | | | | | |
| Program Criteria | | | | | | | | | | | |
| PLO1 Career Paths | | | | | | | | | | | |
| PLO2 Design | | | | | | | | | | | |
| PLO3 Ecological Know. & Respon. | | | | | | | | | | | |
| PLO4 History & Theory | | | | | | | | | | | |
| PLO5 Research & Innovation | | | | | | | | | | | |
| PLO6 Leadership & Collaboration | | | | | | | | | | | |
| PLO7 Learning & Teaching Culture | | | | | | | | | | | |
| PLO8 Social Equity & Inclusion | | | | | | | | | | | |
| Program Criteria | | | | | | | | | | | |
| PLO9 HealthSafetyWelfare in the Built Environ. | | | | | | | | | | | |
| PLO10 Professional Practice | | | | | | | | | | | |
| PLO11 Inclusive Design | | | | | | | | | | | |
| PLO12 Technical Knowledge | | | | | | | | | | | |
| PLO13 Design Synthesis | | | | | | | | | | | |
| PLO14 Prototyping and Testing | | | | | | | | | | | |

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3. METHOD: Describe the method of assessment, and measurement instruments (e.g., rubric, exam items, scoring guide for a particular task, supervisor evaluation form, and standardized assessment tool). Note: direct learning outcome assessment is required. Both direct and indirect assessment are strongly recommended.

Direct measuring instruments include but not limited to: course assignment, portfolios, internships evaluation, capstone course work, thesis, research project, standardized tests, etc.

Indirect measuring instruments include but not limited to: Student survey, interview, alumni survey, employer survey, focus group, students' reflection, etc

| PROGRAM LEARNING OUTCOMES | COURSES | ASSESSMENT TYPE: DIRECT METHODS OF ASSESMENT | ASSESSMENT TYPE: INDIRECT METHODS OF ASSESMENT | MEASUREMENT INSTRUMENTS/ ASSIGNMENTS | BECHMARK/ SCORE | ASSESSMENT RESULTS | CHANGES/ IMPROVEMENTS | NOTES |
|---|--------------------------------|--|--|--|-----------------------------------|---|--|-------|
| PLO1- Career Paths | Arch 753 History Theory | course assignments; | student survey; interview; alumni survey; students' reflection | assignments; papers; | 75% of students score 3 or higher | pending | Recent graduates outreach planned | |
| PLO2- Design | Arch 701 Arch 702 Studio | course research project; portfolios; | student interviews; alumni survey; students' reflection | Research assignments, ¼ semester & midterm & final reviews; Public presentations | 75% of students score 3 or higher | Available portfolios, prototypes and interviews | Check on future work of recent graduates | |
| PLO3-Ecological Knowledge and Responsibility | Arch 757 Materials | Course project assignments; lab tests, portfolios; | student survey; interview; students' reflection | assignments; final documentations or presentations | 75% of students score 3 or higher | Available portfolios & prototypes | Review & improve assignments | |
| PLO4- History and Theory | Arch 753 History Theory | course assignments; | student survey; interview; students' reflection | assignments; papers, exams; | 75% of students score 3 or higher | Available papers | Review & improve assignments | |

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|--|---|---|--|--|-----------------------------------|---|---|--------------|
| PLO5- Research and Innovation | Arch 701& 702 studio | research projects course assignment; portfolios; | student survey; interview; students' reflection | Research reports; ¼ semester & midterm & final reviews; public presentations | 75% of students score 3 or higher | Available portfolios, prototypes and interviews | Review timing and schedule across 2 semesters | |
| PROGRAM LEARNING OUTCOMES | | ASSESSMENT TYPE: DIRECT METHODS OF ASSESMENT | ASSESSMENT TYPE: INDIRECT METHODS OF ASSESMENT | MEASUREMENT INSTRUMENTS/ ASSIGNMENTS | BECHMARK/ SCORE | ASSESSMENT RESULTS | CHANGES/ MPROVEMENTS | NOTES |
| PLO6- Leadership and Collaboration | Arch 752 Multid. Design | course project; assignments; research reports | student survey; interview; alumni survey; students' reflection | assignments; midterm and final presentations | 75% of students score 3 or higher | Available reports, samples | Review once full cohort | |
| PLO7-Learning and Teaching Culture | ARCH 754 Body Min. Built Env | course assignment; | student survey; interview; alumni survey; students' reflection | assignments; papers; | 75% of students score 3 or higher | Available reports, samples | Review once full cohort | |
| PLO8- Social Equity and Inclusion | Arch 701& 702 studio | research projects course assignment; portfolios; | student survey; interview; students' reflection | Research reports; ¼ semester & midterm & final reviews; public presentations | 75% of students score 3 or higher | Available portfolios and interviews | Collect varying types of research reports | |
| PLO9- Health, Safety and Welfare in the Built Environment | Arch 752 Multi D Design | course assignment; | student survey; interview; alumni survey; students' reflection | assignments; exams; presentations | 75% of students score 3 or higher | Available reports | Review once full cohort | |
| PLO10- Professional Practice | Arch 754 BMB Env Arch 755 Env.B.D Intel | course assignment; | student survey; interview; alumni survey; students' reflection | assignments; exams; presentations | 75% of students score 3 or higher | Available reports | Review once full cohort | |

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| PROGRAM LEARNING OUTCOMES | | ASSESSMENT TYPE: <i>DIRECT METHODS OF ASSESMENT</i> | ASSESSMENT TYPE: <i>INDIRECT METHODS OF ASSESMENT</i> | MEASUREMENT INSTRUMENTS/ ASSIGNMENTS | BECHMARK/ SCORE | ASSESSMENT RESULTS | CHANGES/ MPROVEMENTS | NOTES |
|---------------------------------------|--|--|--|--|-----------------------------------|---|---|-------|
| PLO11- Inclusive Design | Arch 755 Env.Beh. D Intell. | course assignment; | student survey; interview; alumni survey; students' reflection | assignments; exams; presentations | 75% of students score 3 or higher | Available reports | Review once full cohort | |
| PLO 12- Technical Knowledge | Arch 756 Med. M Prototype | course assignment; | student survey; interview; alumni survey; students' reflection | assignments; exams; presentations | 75% of students score 3 or higher | Available reports | Review once full cohort | |
| PLO13- Design Synthesis | Arch 701 Arch 702 studio | research projects course assignment; portfolios; | student survey; interview; alumni survey; students' reflection | Research reports; ¼ semester & midterm & final reviews; public presentations | 75% of students score 3 or higher | Available portfolios, prototypes and interviews | Collect varying types of research reports | |
| PLO14- Prototyping and Testing | Arch 756 Med. M Prototype Arch 757 Materials | course assignment; | student survey; interview; alumni survey; students' reflection | assignments; exams; presentations | 75% of students score 3 or higher | Available reports and prototypes | Review once full cohort | |

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4. Timeline of the PLO assessment:

| STUDENT LEARNING OUTCOMES | ACADEMIC YEAR 2023-24 | ACADEMIC YEAR 2024-25 | ACADEMIC YEAR 2025-26 | NOTES |
|---------------------------|-----------------------|-----------------------|-----------------------|-------|
| PLO1 | X | X | X | |
| PLO2 | X | X | X | |
| PLO3 | X | X | X | |
| PLO4 | X | X | X | |
| PLO5 | X | X | X | |
| PLO6 | X | X | X | |
| PLO7 | X | X | X | |
| PLO8 | X | X | X | |
| PLO9 | X | X | X | |
| PLO10 | X | X | X | |
| PLO11 | X | X | X | |
| PLO12 | X | X | X | |
| PLO13 | X | X | X | |
| | | | | |

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5. Personal responsibilities for implementing the assessment, collecting data and analyzing the results against expected outcomes

| STUDENT LEARNING OUTCOMES | TYOLOGY OF DATA | WHO IS RESPONSIBLE FOR COLLECTING DATA | WHO IS RESPONSIBLE FOR ANALYZING DATA | HOW TO IMPLEMENT/ RESPONSE FOR IMPLEMENTATION | TIME FRAME | NOTES |
|---------------------------|---|--|---------------------------------------|---|---------------|-------|
| PLO1 | Alumni outreach; employment & market survey; institutional data | faculty | IDC chair & director | tbd/ course coordinator | annual review | |
| PLO2 | student portfolio; | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| PLO3 | student research; work sample analysis | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| PLO4 | Paper & grade analysis | faculty | IDC chair & director | tbd/ course coordinator | annual review | |
| PLO5 | student portfolio; participation to curricular and extra curricular research projects | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| PLO6 | Data from collaborative class projects | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| PLO7 | employment & alumni survey; student research; sample analysis | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| PLO8 | student portfolio; participation to curricular and extra curricular research projects | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| PLO9 | Paper & grade analysis | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |

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|--------------|---|---------|------------------------------------|-------------------------|---------------|--|
| PLO10 | Assignments, Paper & grade analysis | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| PLO11 | Assignments, Paper & grade analysis | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| PLO12 | Assignments, Paper & grade analysis | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| PLO13 | student portfolio; participation to curricular and extra curricular research projects | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| PLO14 | Assignments, Paper & grade analysis | faculty | IDC chair & director, core faculty | tbd/ course coordinator | annual review | |
| | | | | | | |

II. Brief description of how the plan is shared and communicated with all faculty members in the department

Plans for improvement are discussed among program core faculty and visiting faculty within the coordination meetings regarding each of the classes involved at the beginning and end of the semester, and with the presence of the endowed Chair to facilitate improvement and integration of new ideas for changes. These are also shared during the faculty meetings taking place during the semester (end of the semester).

Interpretation: to what degree did students achieve the program learning outcomes based on your data analysis and expected learning outcomes?

With regards to the fact that the program had the first full cohort in the AY 23-24, we do have a larger sample size to initiate and build a coherent overview of the success of the program learning outcomes.

The actual applied assessment process of partially integrating thesis students of the final year of the BARCH program into the design studio sequence ARCH 701 and ARCH 702, helped to facilitate several research projects and an environment for a larger student

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size. In retrospect, we attest promising results for all especially PLO 2,5,8 and 13 and witness convincing evidence of the M.S.AHD program's dedication to fostering a forward-thinking approach by critically reflecting on disciplinary practices and mindsets with its students. The programs' health and design approach goes beyond traditional learning metrics in the field of healthcare, inspiring students to master advanced technologies and use those to also envision and pioneer disruptive innovations that promise a better health and wellbeing for users and selected audiences.

A significant number of students was producing very good and superior work which highlights their accumulated potential to design challenges overcoming stuck processes, and learning how to drive transformative change in design projects at various scales. Their time in the program has equipped them with the skills, mindset, and ambition to make groundbreaking contributions throughout their careers.

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 [PDSA](#)

Closing the Loop:

The program achieved the set benchmarks and will continue to evaluate its performance consistently throughout and at the conclusion of every semester term. Planning sessions with coordinators and evaluation discussions with all faculty members will be held to ensure the desired standards are upheld in both Fall '24 and Spring '25. As we move forward, our objective will not only be to sustain this outcome but also to refine and expand our practices. Here's how we plan to achieve this:

1. Consolidation of Best Practices: Identify the specific pedagogical methods, tools, and practices that have contributed most effectively to student success in the past academic year. By understanding what works best, we can continue to incorporate these strategies into our core curriculum.
2. Continuous Faculty Development: Faculty play a pivotal role in achieving learning outcomes. Thanks to the involvement of experts we will ensure we remain updated with the latest teaching methodologies and tools, facilitating our ability to guide students effectively.
3. Student Feedback: Regular feedback from students provided effective insights into areas of strength and potential improvement. We'll expand our feedback mechanisms to gather more qualitative data, allowing us to fine-tune our approaches based on direct student experiences.

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4. Expansion of Real-world Exposure: Given the success of practices such as exposing students to real projects via SoAD and MSAHD partners and divulging peer reviewed work such as via participation in international exhibitions like the Venice Biennale and Milan Furniture Fair, we'll seek more such opportunities. Real-world experiences amplify classroom learning and will be prioritized.
5. Innovative Technology Integration: We are continuously updating our curriculum to include the latest technological advances (3D printing, VR, AI), ensuring our students remain at the forefront of industry developments.
6. Collaborative Projects: Continue with team-based projects that encourage transdisciplinary collaboration with College of Osteopathic Medicine, and the School of Health Professions, fostering a culture of teamwork, peer learning, and collective innovation.
7. Alumni Engagement: Involve our alumni who are out in the professional Healthcare world to provide mentorship, offer workshops, and share their experiences. This bridges the gap between academic learning and practical application.

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

The faculty engagement was an essential component in the continual refinement of our educational approach, described in this report. Through regular coordination meetings involving all core and external consultants associated with the program's courses and studios, we've explored the feedback from our students, investigated tangible opportunities to prepare them for real-world challenges, and brainstormed potential curriculum enhancements. Additionally, our faculty played a pivotal role in formulating the metrics used in this report, ensuring an informed and comprehensive evaluation process.

Furthermore, our engagement efforts transcended the immediate teaching circle. We've had received valuable insights from guest critics, providing an external perspective that enriches our program's approach. Moreover, a shared enthusiasm for health and design and related technology and materials research further solidified the bond between our faculties, even those not directly involved in course instruction.

This collaborative spirit ensures our program remains at the forefront of architectural education, offering students an experience that's both contemporary and impactful.

Last updated 7/30/24