

Julius Panero and Martin Zelnik

School of Art + Design – Spring 2025 Instructors: Julio Figueroa & **Rehana Lewis**

INT 264; Interior Design Studio II

New Jersey Institute of Technology

"...interior environments are all utilized by individuals of varying body sizes, weight, age, and physical condition. On a global basis, users may also reflect a wide range of races, cultures, and ethnic backgrounds. Despite the variables involved, however, the interface between the user and the designed interior environment, or ergofit, must ensure comfortable, safe, and efficient enjoyment of that environment."

"I notice that the idea of 'expert' has changed. An expert used to be 'somebody with access to special information'. Now, since so much information is equally available to everyone, the idea of 'expert' becomes 'somebody with a better way of interpreting.' Judgment has replaced access."

"In this age of industrial production and technical exactness, we also strive to produce works of art with total precision."

"The details are not the details. They make the design."

"I am eccentric, I admit it, but I am not a nutcase."

László Moholy-Nagy

Syllabus

Zaha Hadid

Type of Course/Format:

Four-credit undergraduate interior design studio meeting two times per week. Lectures and presentations are made at irregular intervals throughout the semester. Course meeting times: Monday and Thursday 1:00 PM – 5:20 PM in the Sunroom/6th Floor Weston Hall.

The studio experience is optimized when everyone works together, or at least in parallel with easy and direct access to one another. There is an acknowledged need for student-to-student (i.e., peer) connections without the filter of a teacher or studio critic.

Prerequisites and Co-requisites:

Prerequisites AD 150 Color and Composition and INT 263 Interior Design Studio I must be completed with a passing grade. INT 222 Building and Interior Systems II must either be completed with a passing grade or taken with studio as a co-requisite. (Note: Because the two Building and Interior Systems courses may be taken in any sequence, successful completion of INT 221 Building and Interior Systems I is not a prerequisite for INT 264 but is a pre/co-requisite for INT 363.)

Office Hours:

In-person consultations are available by appointment only. There is no guarantee of availability for unscheduled "walk-ins" without an appointment. Digitally mediated consultations are available at off-hours via Webex.



Charles Eames

Brian Eno

Disabilities and Accommodations:

Students with documented disabilities should inform the instructor *during the first week of the semester* to receive appropriate accommodations. Any chronic/permanent disability for which accommodations may be required – whether taken or not by the student – must be documented with, and confirmed by, the NJIT Office of Student Disability Services. (Students are not required to avail themselves of any accommodations to which they are entitled.) Temporary disabilities that are obvious (e.g., broken arm) may be assessed by the instructor but is still required to be documented with the Office of the Dean of Students. Accommodations sought after the start of the semester will only be offered to students in those instances where the disabilities are diagnosed or have the first instance of occurrence during the semester. No retroactive accommodations are available.

Attendance:

Attendance is required, and students are expected to be prepared for all classes. This means that on those days for which studio critiques are scheduled, students will have (new) work to critique by the instructor

and/or visiting guest critics. After three unexcused absences, students may incur a ½ grade penalty for each additional unexcused absence. Beyond the attendance requirements, participation will be considered as part of the final semester grade. Be on time! It is important to be present at the start of class.

NOTE: Absences for religious observances are considered excused but generally these are not spontaneous and are scheduled in advance (even those based on the lunar calendar that rely on visual sightings have a range of expected dates identified by the start of the semester). As such, any expected absence due to a religious observance must be communicated to the instructor during the first full week of class and accommodations will be made accordingly. Religious holidays recognized by the State of New Jersey Department of Education are listed at the Department of Education website (*https://www.nj.gov/education/holidays.shtml*; then follow the link to 2022-2023). It is also acknowledged that specific holidays may vary in significance and degree of observance within a religion. Students should communicate to the instructor how observations will affect personal schedules. An individual student may have excused absences for one, and only one, religion during the semester. While absences may be excused for religious holidays, work must still be completed in a timely manner. When a religious holiday conflicts with a due date for an assignment, that assignment shall be submitted no later than the start of the first class following the holiday unless other arrangements are made with the approval of the instructor. Absences from class for athletic team practices is not an excused absence and is prohibited by the *2022-2023 NJIT Student-Athlete Handbook*. Student-athletes shall coordinate with the instructor when participation in intercollegiate events (home or away) may interfere with regularly scheduled classes.

Course Overview:

The spring semester course *Interior Design Studio II* builds on the design principles and processes discussed in the first semester of design studio; and expands the projects in scope and scale. Using common activities like eating and drinking (generally in a public venue and as a quasi-public activity), buying and selling, and meeting and making as vehicles for exploration, students will explore the nature of interior space from organizational principles to detailed development. Projects will require manipulation of multiple variables that include spatial and formal organization, function, aesthetics, furniture and finishes, signage/wayfinding (including graphic identity), and building systems (structure, HVAC, and lighting). There is an opportunity to analyze interior spaces and their components and, of course, to design. As a continuation of the fall term, there will be additional opportunities to improve communication skills and to design and present with a variety of digital and traditional media. Abstraction and representation are integrated with an increased focus on profession-specific graphic conventions.

There will be an analysis of interior and architectural components intended to broaden the exposure to, and increase the vocabulary of, elements available for use by the interior designer and architect. Following up on the completion of the history sequence (two terms of art + design history and one of architecture), there will be additional architectural and interiors analyses. Buildings are a context of the interior designer. Just as architects need to understand the urban/built context in which they insert their buildings (as well as the landscape implications of site design), interior designers need to understand the architectural context in which – and for which – they design their spaces.

There are two primary non-residential design projects. The first is a relatively small establishment (café) with a primary customer/ user-oriented space (as well as service spaces). The second project is expected to be a community arts center which is a larger establishment with different technical requirements (including internal structure and vertical transportation/travel), and a different atmosphere/social environment. In both cases students will study and consider user needs and the quality of place/atmosphere of the commercial enterprises being designed in addition to the above-mentioned variables. However, by virtue of the selection of project type, there may be an overlap of technical requirements (including some code requirements) that can make technical research more economical, enabling students to spread out their efforts among a greater variety of design tasks and variables.

Learning Objectives:

- To introduce students to current discourse in interior design through assignments, lectures, and films;
- To expose students to a systems view of interior design, architecture, building and construction;
- To provide continued practice with an iterative and reflective design process when dealing with projects of increasing programmatic complexity;
- To develop increasing proficiency in making articulate oral and written arguments in a context relevant to design;
- To develop greater proficiency in the use of multiple three-dimensional modeling applications with digital media as part of the design and presentation processes, and to better to understand structural/algorithmic differences in the types of software programs to facilitate a more informed choice in the selection of application(s) best-suited for a particular task;
- To explore, through practice, the implications of designing using VR (virtual reality) throughout the preliminary design process as well as during the more detailed design development and final presentations;
- To provide a design-based introduction to issues of life safety, circulation/access, and structure through their applications in design projects;
- Through coordination with the building systems courses, begin the explicit integration of power distribution requirements, lighting, mechanical systems, and acoustic performance into the design process;
- To reinforce the need to integrate universal design (barrier-free access) principles to public spaces and commercial establishments;
- To provide opportunities to explore interior design as a knowledge- and research-based activity;
- To introduce the task of discovering sources for material and products and performance criteria for their integration into a design project;
- To reinforce the use of critical judgment and analysis when studying conditions of context and design;
- To comply with NASAD (National Association of Schools of Art and Design) professional standards as they apply to an interior design studio in reinforcement of basic design principles in both 2D and 3D, in the use and integration of technology and equipment applicable to interior design in the context of art and design, in the use of historical precedent as a means to inform and understand design, in the development of a facility for critical thinking and creative problem solving, and in the establishment of a recognition that the primary responsibility of the designer is to the health, safety, welfare, support, and enrichment of all members of society.
- To comply with CIDA (Council for Interior Design Accreditation) 2020 professional standards as listed below:

3b – **Learning Environment and Resources**: Instructional facilities and workspaces support program objectives and course goals.

3c – Learning Environment and Resources: The program provides a constructive and respectful learning environment that encourages professionalism and engagement across faculty, staff, and students.

3d – Learning Environment and Resources: Equipment and technological support is available and appropriate to support program objectives and course goals.

3e – **Learning Environment and Resources**: Students have convenient access to a current range of information (bound, electronic, and/or online) about interior design and relevant disciplines as well as product information and samples.

7a – Human-Centered Design: Student work demonstrates and understanding of theories related to the impact of the built environment on human experience, behavior, and performance.

7c – Human-Centered Design: Student work demonstrates the ability to gather and apply human-centered evidence.

7d – Human-Centered Design: Student work demonstrates the ability to analyze and synthesize human perception and behavior patterns to inform design solutions.

7e– Human-Centered Design: Student work demonstrates the ability to apply human factors, ergonomics, and universal design principles to design solutions.

8a – Design Process: Student work demonstrates the ability to apply space planning techniques throughout the design process.

8b – **Design Process**: Student work demonstrates the ability to apply knowledge and skills learned to solve progressively complex design problems.

8c – Design Process: Student work demonstrates the ability to apply knowledge and skills learned to identify and define issues relevant to the design problem.

8d – Design Process: Student work demonstrates the ability to apply knowledge and skills learned to synthesize information to generate evidence-based design solutions.

8e – Design Process: Student work demonstrates the ability to apply knowledge and skills learned to use precedents to inform design concepts or solutions.

8f – Design Process: Student work demonstrates the ability to apply knowledge and skills learned to explore and iterate multiple ideas.

8g – **Design Process**: Student work demonstrates the ability to apply knowledge and skills learned to design creative and effective solutions.

8j – Design Process: The interior design program includes exposure to a range of problem identification and problem-solving methods.

8k – Design Process: The interior design program includes opportunities for innovation and risk taking.

8I – Design Process: The interior design program includes exposure to methods of idea generation and design thinking.

9a – Communication: Students are able to effectively interpret and communicate data and research.

9b – Communication: Students are able to effectively express ideas and their rationale in oral communication.

9c – Communication: Students are able to effectively express ideas and their rationale in written communication.

9d – **Communication**: Students are able to effectively express ideas and their rationale developed in the design process through visual media: ideation drawings and sketches.

9e – **Communication**: Students are able to effectively express project solutions using a variety of visual communication techniques and technologies appropriate to a range of purposes and audiences.

9f – Communication: The interior design program provides opportunities for exposure to evolving communication technologies.

10b – **History**: Students understand the basic context and framework of history as it relates to furniture, decorative arts, and material culture.

10c – History: Students understand the basic context and framework of history as it relates to architecture.

10d – History: Students understand the basic context and framework of history as it relates to art.

11a – **Design Elements and Principles**: Students understand the elements and principles of design and related theories, including spatial definition and organization.

11b – **Design Elements and Principles**: Student work demonstrates the ability to explore a range of two- and threedimensional design solutions using a variety of media.

11d – **Design Elements and Principles**: Students effectively apply the elements and principles of design and related theories throughout the interior design curriculum to three-dimensional design solutions.

12b – Light and Color: Students understand the principles of natural and electrical lighting design.

12d – Light and Color: Students competently select and apply luminaires and light sources.

12e – Light and Color: Students have awareness of sources for information and research about color.

12f – Light and Color: Students understand how light and color in the interior environment impact health, safety, and wellbeing in the interior environment.

12h – Light and Color: Student work demonstrates understanding of color principles, theories, and systems.

12i – Light and Color: Student work demonstrates understanding of color in relation to materials, textures, light, and form.

12j – Light and Color: Student work demonstrates the ability to appropriately select and apply color to support design concepts.

12k – Light and Color: Student work demonstrates the ability to appropriately select and apply color to multiple design functions.

13a – **Products and Materials**: Student work demonstrates an understanding of how furnishings, objects, materials, and finishes work together to support a design intent.

13c – **Products and Materials**: Student work demonstrates an understanding of appropriate design or specification of furnishings, equipment, materials, and finishes in relation to project criteria and human and environmental wellbeing.

13d – **Products and Materials**: Students select and apply products and materials on the basis of their properties and performance criteria, including ergonomics, environmental attributes, life safety, and life cycle cost.

13e – **Products and Materials**: Students are able to design and specify a broad range of appropriate products, materials, objects, and elements in support of the design intent.

14a – **Environmental Systems and Comfort**: Students understand that design decisions relating to acoustics, thermal comfort, and indoor air quality impact human wellbeing and the environment.

14b – Environmental Systems and Comfort: Students understand the principles of acoustic design.

14c – Environmental Systems and Comfort: Students understand appropriate strategies for acoustic control.

14i – **Environmental Systems and Comfort**: Students understand how the selection and application of products and systems impact indoor air quality.

15b – **Construction:** Student work demonstrates understanding that design solutions affect and are impacted by base building structural systems and construction methods.

15d – **Construction:** Student work demonstrates understanding that design solutions affect and are impacted by detailing and specification of interior construction materials, products, and finishes.

15e – **Construction:** Student work demonstrates understanding that design solutions affect and are impacted by the integration of building systems including electrical (such as power, data, lighting, telecommunications, audio visual) and mechanical (such as HVAC, plumbing, and sprinklers).

15g – **Construction:** Student work demonstrates understanding that design solutions affect and are impacted by vertical and horizontal systems of transport and circulation such as stairs, elevators, or escalators.

16a – Regulations and Guidelines: Students have awareness of the origins and intent of laws, codes, and standards.

16d – **Regulations and Guidelines**: Student work demonstrates the ability to apply federal, state/provincial, and local codes including fire and life safety.

16e – **Regulations and Guidelines**: Student work demonstrates the ability to apply barrier-free and accessibility regulations and guidelines.

Course Requirements:

Three introductory assignments will occupy the studio during the first 2-weeks of the semester that will require written, graphic, and verbal presentations/submissions. In all cases, students will be considering issues of design process and values. Critical judgment will be required in all three projects. Additionally, the projects will require observation and exploration of various elements and components used in interior design. In-class discussions will accompany all three projects. Students will then design a project that requires an understanding and analysis of a piece of furniture (a chair) and, at the same time, requires the integration of user needs/function in a programmatically simple space. The second and final project will be the design of a multi-level community arts center that will be inserted into a large volume of existing space, thereby requiring greater proficiency with integration of the material studied and introduced in INT 221 and INT 222 (*Building and Interior Systems I and II*) and ARCH 282 (*Structural Principles*). In both major design projects, students shall work collaboratively to measure and record the data of existing conditions and create the base site model so that all students work from the same data.

Grading Criteria:

Projects will be graded roughly in proportion to the time allotted. In general, work will be graded based on the presence of a concept, the extent of the concept, and the execution of the concept – including proficiency and craft in presentation (graphic, written, oral).

Grades will follow the university guidelines: A (superior), B+ (excellent), B (very good), C+ (good), C (acceptable), D (minimum), F (inadequate). Incomplete grades will be given only in those instances where there is a documented medical excuse and/or in cases where a student with a registered disability has accommodations that include extra time. Any student who has a disability that may affect the quality of work produced or the ability to complete any assignment within the allocated time must inform the design critic at the start of the semester. Grades for individual assignments (papers, presentations, projects) will usually be given to students within two weeks of completion of the assignment.

Proportions for INT 264 are: Design Object – 3%; Reflection Paper – 6%; Components and Conditions – 5%; Design Project #1 – 30%; Analysis – 10%; Design Project #2 – 40%; Collaboration and Participation – 6%.

Bibliography

Recommended Books Containing Readings or Reference Material Related Directly to Projects. Where eBOOKS are available, they are noted.

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- Ching, Francis D.K. Building Structures Illustrated/2nd Edition (Hoboken, NJ: John Wiley & Sons, 2014) Available as eBOOK.
- Clark, Roger H. and Michael Pause. *Precedents in Architecture: Analytic Diagrams, Formative Ideas, and Partís*/4th Edition. Hoboken, New Jersey: John Wiley & Sons, 2012. Available as eBOOK.
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- De Chiara, Joseph and Michael J. Crosbie. *Time-Saver Standards for Building Types*/4th Ed. (New York, NY: McGraw-Hill, 2001)
- De Chiara, Joseph with Julius Panero and Martin Zelnik. *Time-Saver Standards for Interior Design and Space Planning/2nd Edition*. (New York, NY: McGraw-Hill, 2001)
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- Fischer, Joachim and Martin Nicholas Kunz, editors. *Café & Restaurant Design/3rd Edition*. (Kempen, Germany and West Byfleet, Great Britain: teNeues Publishing Group, 2007)
- Gestalten, editor. Appetizer: New Interiors for Restaurants and Cafés. (Berlin, Germany: Die Gestalten Verlag, 2017)
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- Godsey, Lisa. Interior Design Materials and Specifications/2nd Edition. (Sydney, Australia: Fairchild Books, 2012)
- Harmon, Sharon Koomen and Katherine E. Kennon. The Codes Guidebook for Interiors/5th Edition. (Hoboken, NJ: John Wiley & Sons, 2011)
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- Hinchman, Mark. *History of Furniture: A Global View*. (New York, NY: Fairchild Books, 2009)
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- Wiedemann, Julius and Marco Rebora, editors. *Restaurant and Bar Design*. (Köln, Germany: Taschen, 2014)

Films/Videos

- Concert of Wills: Making the Getty Center (Bob Eisenhardt, Susan Froemke, Albert Maysles)
- Charles Rennie Mackintosh: A Modern Man (Richard Downs)
 - https://www.youtube.com/watch?v=LNrV6vbu4os
 - https://www.youtube.com/watch?v=LGLeC48jbzE
 - o https://www.youtube.com/watch?v=tkkwNvKMVs4
- ARTE Architectures < https://www.youtube.com/playlist?list=PLIAeAeZi1_39A8eg78M8NtBwh8-R6D0iE>
 - Architecture Collection Episode 1 x 1: Gropius The Dessau Bauhaus
 - Architecture Collection Episode 1 x 4: *House by Jean Nouvel*
 - Architecture Collection Episode 2 x 5: *The Paris Fine Art School by Felix Duban*
 - Architecture Collection Episode 3 x 5: Auditorium Building Chicago by Sullivan & Adler