INT 364; Interior Design Studio IV
School of Art + Design – Spring 2025
New Jersey Institute of Technology

Section 002: Natalie Holmes-Mitchell (*natalie.holmesmitchell@njit.edu*/908.499.0365)
Office Hours: Thursday 12 Noon – 1:00 PM

Section 004: Glenn Goldman (*glenn.goldman@njit.edu/683 Weston Hall*/973.596.3012)
Office Hours: Monday 9:00 AM – 12:00 Noon by appointment. Online/Zoom meetings by appointment.

"Good design is good business."

Thomas J. Watson, Jr.

"Design is the silent ambassador of your brand."

Paul Rand

"Behind every attractive room is a good reason."

Sister Parish

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

Zaha Hadid

Type of Course/Format:
Five-credit undergraduate interior design studio meeting two times per week. Lectures and presentations are made at irregular intervals throughout the semester. Field trips/site visits may occur when appropriate. Course meeting times: Monday and Thursday 1:00 PM – 5:20 PM.

Course Description/Prerequisites and Co-requisites:
INT 221, INT 222, INT 321, INT 363. Co/prerequisite: INT 223.
A continuation of the studio sequence with design and space planning projects of increasing complexity selected within the context of commercial and institutional building types – from office environments and healthcare facilities to religious venues and community facilities. Students are expected to further develop skills to simultaneously resolve conceptual, technical, aesthetic, and functional aspects of design.

Accommodations for Disabilities:
NJIT and instructors will endeavor to make any accommodation required and necessary for the success of students with disabilities. However, in order to receive accommodation(s), disabilities MUST be documented with NJIT Office of Accessibility Resources and Services (201 Kupfrian Hall; oars@njit.edu) and notification of request for accommodation must be made to the instructor by the second week of class. More information may be found at: https://www.njit.edu/accessibility/. No accommodations can be granted "after the fact" unless due to a situation (injury/illness/etc.) that occurs or is documented during the semester. In those instances, accommodations will commence upon notification or observation of the disability. If approved for accommodation(s), it is at the discretion of the approved students whether or not to avail themselves of these opportunities. Failure to utilize approved accommodations will not be considered when preparing final grades or assessments for the course. Please understand that some accommodations are publicly evident (like extended time on project presentations) and utilization of these accommodations will be seen by other students which removes any right(s) to privacy about those accommodations.

Color deficient vision is not considered a disability that will prevent full completion of the course. Those students with color deficient vision shall make themselves known to the instructor and assignments and critiques will be modified when and if necessary.

Attendance:

ALL students enrolled for classes in the School of Art + Design have an attendance requirement overlaid on the grading criteria. (This requirement/penalty is separate from the participation component of the grade.) No more than three unexcused absences are permitted without a grade reduction. Each unexcused absence above three (starting with the fourth) will result in a grade reduction for the semester. In other words, four absences would result in a maximum grade of B+ (assuming everything done is of "A" quality), five absences would result in a maximum grade of "B", six in a maximum grade of "C+", etc. This means if you have 9 unexcused absences (about one-third of the semester), you cannot pass the course. Students do NOT receive extensions for submission of work due to unexcused absences. Absences for illness to be excused MUST be accompanied by documentation from professional medical personnel who are NOT members of your family and submitted to the Office of the Dean of Students who, upon approval, will notify the instructor. ***Since religious holidays are known in advance, students who expect to be absent due to religious holidays must notify their lab/studio instructor by the second week of class***. Absences for religious holidays (assuming proper notification) are considered excused absences and due dates of assignments will be adjusted so that work is submitted as soon as practicable at the conclusion of the holiday. 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 2024-2025). 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.

It is the student's responsibility to get to class on time. The instructor is under no obligation to repeat any missed information or provide access to lecture notes or presentation materials to students who arrive late, and it remains the responsibility of the student to learn the material presented in the course. Tardiness for in-person classes can be particularly disruptive and rude.

Students are expected to be working on their projects during the scheduled class time when individual critiques are being given. Students should have (new) work to discuss for critique days. When work is due, it must be ready at the start of class. Attendance in a design studio means more than simply "showing up."

Absences from class for athletic team practices is not an excused absence and is prohibited by the *2024-2025 NJIT Student-Athlete Handbook* (https://njithighlanders.com/documents/2024/8/1/2024_Book_7.31.24.pdf). Student-athletes shall coordinate with the instructor when participation in intercollegiate events (home or away) may interfere with regularly scheduled classes.

Artificial Intelligence (AI):

Generative artificial intelligence has the potential to improve decision-making and enhance creativity. While it does not have to be used, it is certainly a tool that could be used to benefit the project. However, to uphold academic integrity with the use of AI, students must consider the limitations of AI and use it critically. Be aware of the possibility of bias, incomplete and/or inaccurate information, plagiarism, and issues of data privacy. Students are responsible for any information or work presented that is generated in any capacity with AI tools (e.g., *Spring AI*, *ChatGPT*, *Midjourney*, *ideogram.ai*). Students must cite the use of generative AI and document intermediate design steps showing text and prompts along with any images generated by AI. Tool(s) used must be cited. Do not simply copy and paste AI-generated material and claim it as your own. Modifications made by the designer and the way AI-generated work is used must be made clear and documented. In other words, the design and presentation processes must be documented when AI-generated work is incorporated at any step. It is imperative that you, as designer, control the use of AI rather than simply accepting what was put together without critical input or evaluation.

Cell Phone Use and Miscellaneous Policies:

Cell phone use for conversations or texting is NOT permitted during lectures and presentations made by either the instructor or your classmates at any time! It is a *distraction* that steals the ability to concentrate from students and the presenter. It is recognized, however, that your phones and cameras interact with QR codes included in presentations and may be a valuable asset to use to fully explore a project being shown. It is also reasonable, during presentations, to use search functions on your phone (e.g., Google) to get information about an item, project, or people (like other designers) being referenced in a presentation. **Use common sense!** Watching random videos (whether they are of interest to you or not) is not a good use of your time and is an inappropriate use of technology during class/studio. If at any time, the studio critic believes that this liberal policy is being abused, then further limitations will be placed on cell phone use during the semester.

If during studio time you must take a phone call, and the timing does not interfere with your own critique, take the call outside the room so as not to distract other students.

Lectures or video presentations by a student, teacher, or guest lecturer may not be recorded at any time due to the inclusion of copyrighted material/intellectual property shown within "fair use" provisions.

Course Overview and Requirements:

The spring semester course *Interior Design Studio IV* builds on the design principles and processes discussed in the previous three semesters of design studio; and expands the projects into a distinctly non-residential milieu. 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.

There will be two design projects, an analysis project and presentation, and a pair of short investigations that bridge the gap between analysis and synthesis. Each project may have "sub-projects" that are part of the studio and may receive grades independently of a final project grade. The first project is a two-week team design project (IDEC student competition) of a "multi-generational" space or shelter. This will be followed by two short projects and then an analysis project that will overlap, in part, with the primary design project of a multi-level commercial interior. Critical judgment will be required in all work. Additionally, the projects will require observation and exploration of various elements and components used in interior design. In-class discussions will accompany all projects. It is expected that students will (heavily) rely on the knowledge gained in Building and Interior Systems (INT 221 and INT 222), Structural Principles (INT 223), and Methods and Materials (INT 321) to complete a comprehensive project.

Students will be expected to work primarily digitally although traditional media may be employed as part of the design process at the discretion of the designer. It is further expected that students will be taking advantage of the applications available in the School of Art + Design and utilize Building Information Modeling (*Revit*) for the design and presentation processes. VR headsets will be provided and utilized during the design process to discover and work with the nature of the space being designed (by using both *Revit* and *Enscape*) and to more effectively find "errors" or missing items in the design that might otherwise remain unseen by the designer (or critic). Studio computers were specified to be able to work with VR headsets requiring DisplayPort connectivity.

Final work for each project along with selected process work **must** be uploaded to **Kepler** (access through Canvas). The instructor shall provide additional information for each project at the appropriate time. NOTE: Uploading to Kepler is a necessary but not sufficient condition to pass the studio. ALSO, uploading to Kepler is not the same as submission of final work to the instructor. Follow directions for each project from the instructor for submission method and criteria. All work, including physical work, must be digitized for submission. Required file formats will be listed with each assignment.

Grading Criteria:

Projects will be graded *roughly* in proportion to the time allotted. In general, design 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 will usually be given to students within two weeks of completion of the assignment.

Grade allocations are subject to change as assignments change or are modified throughout the semester. Initial proportions for INT 364 are: Design Object – 4%; Components and Conditions – 6%; Design Project #1 (IDEC Competition) – 15%; Analysis – 15%; Design Project #2 Research – 5%; Design Project #2 (part 1) – 10%; Design Project #2 (part 2) – 35%; Collaboration and Participation – 10%.

Academic Integrity:
"*Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy.*

Please note that it is your professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing, or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu" <John A. Pelesko, Provost>

Information about the Academic Integrity Policy and links to the code may be found at: https://www.njit.edu/dos/academic-integrity.

To be clear, do your own work (except when group work is assigned) and cite sources properly when writing or presenting research. Unless explicitly permitted by the instructor (and properly cited) and through clear permissions online, students may not use downloaded images from the internet or work created by others into their own design project(s). The use of generative AI shall be permitted when approved by the instructor within the parameters set in class. Any use of generative AI must be identified and the process documenting its use shall be provided with the project deliverables (including at interim presentations/reviews). ***Once generative AI is used, its accuracy and quality shall be the responsibility of those who use it***.

One design project in this studio is collaborative, and each member of a student team is expected to contribute. While it is the intent to grade a project based upon team performance, the instructor reserves the right to distinguish between efforts and final production when it comes to project evaluation and grading.

Learning Objectives:

- To introduce students to current discourse in interior design through assignments, lectures, and/or films;
- To expose students to a systems view of interior design, architecture, and building;
- 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 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 continue studying design-based applications of issues of life safety, circulation/access, and structure through design projects;
- To apply knowledge gained from the building systems courses and integrate 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 provide opportunities to integrate generative artificial intelligence (AI) and virtual reality (VR) into the design process;
- To include 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 in whole or in part with CIDA (Council for Interior Design Accreditation) 2024 professional standards listed below:
  3b – Learning Environment and Resources: Instructional facilities and workspaces support program objectives and course goals.
  3c – Learning Environment and Resources: The program demonstrates efforts to support a constructive and respectful learning environment that fosters professionalism and engagement across students, faculty, and staff.
  3d – Learning Environment and Resources: Equipment and technological support are 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.
  5e – **Collaboration:** Students understand the dynamics of team collaboration and the distribution of team responsibilities.
  7b – Human-Centered Design: Student work demonstrates and understanding of the relationship between the designed environment and human experience, wellbeing, behavior, and performance.
  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.
  8d – Design Process: Student work demonstrates the ability to apply knowledge and skills learned to synthesize information to generate evidence-based design 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.
  8h – Design Process: Student work demonstrates the ability to apply knowledge and skills learned to execute the design process: pre-design, quantitative and qualitative programming, schematic design, and design development.
  8k – Design Process: The interior design program includes opportunities for innovation and risk taking.
  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.
  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.
  10e – History: Students understand the basic context and framework of history as it relates to architectural styles and movements.
  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 three-dimensional 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.
  12d – Light and Color: Students competently select and apply luminaires and light sources.
  12g – Light and Color: Student work demonstrates an understanding of color in relation to materials, textures, light, and form.
  12h – Light and Color: Student work demonstrates the ability to appropriately select and apply color to support design purposes.
  12i – Light and Color: Student work demonstrates the ability to appropriately use color solutions across different modes of design communication.
  13a – Products and Materials: Student work demonstrates an understanding of how furnishings, objects, materials, and finishes work together to support a design intent.
  13d – 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.
  13e – Products and Materials: Students select and apply products and materials on the basis of their properties and performance criteria, including ergonomics, environmental attributes, and life safety.
  13f – Products and Materials: Students are able to design and specify a broad range of appropriate products, materials, furniture, fixtures, equipment, 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 acoustical design and acoustical control.
14f – Environmental Systems and Comfort: Students understand principles and strategies of indoor air quality.
15b – Construction: Student work demonstrates understanding that design solutions affect and are impacted by base-building structural systems and construction methods.
15c – Construction: Student work demonstrates understanding that design solutions affect and are impacted by interior systems, construction, and installation 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, security and audio visual) and mechanical (such as HVAC, plumbing, and sprinklers).
16a – Regulations and Guidelines: Students have awareness of the origins and intent of laws, codes, and standards.
16i – Regulations and Guidelines: Student work demonstrates the ability to apply federal, state/provincial, and local codes including barrier-free and accessibility regulations and guidelines.

Resources

Books, articles, and journal studies are expected to be assigned throughout the semester as they pertain to issues critical to the development of the project at the time. As always, individual initiative is expected from each student to seek out readings and sources for inspiration, insight, and guidance.

Films/Videos (may be screened in class).

- *Playtime* (Jacques Tatí)
- *Concert of Wills: Making the Getty Center* (Susan Froemke, Bob Eisenhardt, Albert Maysles)
- *Charles Rennie Mackintosh: A Modern Man* (Richard Downs)
    - https://www.youtube.com/watch?v=LNrV6vbu4os
    - https://www.youtube.com/watch?v=LGLeC48jbzE
    - 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*

Recommended Books Containing Readings or Reference Material Related Directly to Projects. Where eBOOKS are available, they are noted. This is a limited list. Additional books about office and commercial design are available.

- American Institute of Architects. *Ramsey/Sleeper Architectural Graphic Standards*/12th Edition. (Hoboken, NJ: John Wiley & Sons, 2016)
- Arnheim, Rudolf. *The Dynamics of Architectural Form*. (Berkeley, California: University of California Press, 1978)
- Bakker, Mary Lou. *Space Planning for Commercial Office Interiors/3rd Edition*. (New York, NY: Bloomsbury Academic/Fairchild Books, 2025) NOTE: 3rd edition to be released April 3, 2025. The 2nd edition is available until then.
- Charlish, Anne, ed. (Introduction by Sir Francis Watson). *The History of Furniture*. (New York: William Morrow & Company, Inc., 1976)
- Ching, Francis D.K. *Architecture: Form, Space, & Order*/4th Edition. (Hoboken, NJ: John Wiley & Sons, 2014) Available as eBOOK.
- Ching, Francis D.K. *Building Codes Illustrated: A Guide to Understanding the 2018 International Building Code*/6th Edition. (Hoboken, NJ: John Wiley & Sons, 2018)
- Ching, Francis D.K. *Building Construction Illustrated*/5th Edition. (Hoboken, NJ: John Wiley & Sons, 2014)
- 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.

- Conrads, Ulrich, ed. *Programs and Manifestoes on 20th Century Architecture*. Cambridge, Massachusetts: MIT Press, 1975. (Originally published 1964.)
- 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)
- Farrelly, Lorraine. *Representational Techniques*. (Lausanne, Switzerland: AVA Publishing SA, 2008)
- Fiell, Charlotte and Peter Fiell. *Design of the 20th Century*. (Köln, Germany: Taschen, 2012)
- Ghirardo, Diane. *Architecture After Modernism*/World of Art Series. (New York, NY: Thames & Hudson, 1996)
- Gillen, Nicola. *Future Office: Next-generation Workplace Design*. (London, England: RIBA Publishing, 2019)
- 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)
- Hinchman, Mark. *History of Furniture: A Global View*. (New York, NY: Fairchild Books, 2009)
- Karlen, Mark and Rob Fleming. *Space Planning Basics*/4th Edition. (Hoboken, NJ: John Wiley & Sons, 2016)
- Leupen, Bernard with Christoph Grafe, Nicola Körnig, Mark Lampe and Peter de Zeeuw. *Design and Analysis/2nd Edition*. (Rotterdam, Netherlands: 010 Publishers, 1997)
- Lidwell, William with Kritina Holden and Jill Butler. *Universal Principles of Design*. (Beverly, MA: Rockport Publishers, 2003)
- McGowan, Maryrose and Kelsey Kruse, editors. *Interior Graphic Standards*. (Hoboken, NJ: John Wiley & Sons, 2004)
- Nagle, Charles. American Furniture, 1650-1850, A Brief Background and Illustrated History. (New York: Chanticleer Press, 1949) Available as eBOOK.
- Neufert, Ernst and Peter Neufert. *Architects' Data/4th Edition*. (Hoboken, NJ: Wiley-Blackwell/John Wiley & Sons, 2012)
- Norman, Donald. *The Design of Everyday Things: Revised and Expanded Edition*. (New York, NY: Basic Books, 2013) Available online as PDF: <https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxkZHN1bmxhbXxneDplZGRkMGFiODdhNmJiY2I>
- Norman, Donald. *Emotional Design: Why We Love (or Hate) Everyday Things*. (New York, NY: Basic Books, 2007)
- Panero, Julius and Martin Zelnick. *Human Dimension and Interior Space: A Source Book of Design Reference Standards*. (New York, NY: Watson-Guptill, 1979)
- Rasmussen, Steen Eiler. *Experiencing Architecture*. (Cambridge, MA: MIT Press, 1964) Available as eBOOK: http://ebookcentral.proquest.com.libdb.njit.edu:8888/lib/njit/detail.action?docID=6246560 .
- Salvadori, Mario. *Why Buildings Stand Up*. (New York: W.W. Norton & Company, 1980)
- van Meel, Juriaan and Yuri Martens and Hermen Jan van Ree. *Planning Office Spaces: A Practical Guide for Managers and Designers*. (London, England: Laurence King Publishing, 2010)