



IND 3468 Interior Environmental Technologies

Meeting Time Tuesday/Thursday, Periods 2 - 3 (9:00 - 10:25AM) RNK 0230

Instructor **Nam-Kyu Park**, PhD, LEED AP npark@ufl.edu (352) 294-1437
Office hours: R 10:30 – 12:30 am (or by appointment) Office: 354 Arch
Zoom meeting room: <https://ufl.zoom.us/j/9876532945>, ID: 987 653 2945

COURSE INTENTIONS

This course will help interior design students understand and visualize the types of building systems that exist between the walls, ceilings, and under the floors of buildings. The primary goal of this course is to give students an introduction to the relationships between people, technology, and the environments that we inhabit daily. A secondary goal of this course is to familiarize students with the vocabulary and concepts of environmental controls used by designers. From this knowledge base, students will develop a more holistic understanding of design considerations for building systems within interior spaces and be able to implement these concepts in their current and future design work.

COURSE OBJECTIVES

In accordance with *the Council for Interior Design Accreditation (CIDA) Professional Standards 2022*, this course will help students:

- Understand that human and environmental conditions vary according to geographic location and impact design and construction decisions (4a).
- Have awareness that multiple disciplines and stakeholders are involved in creating an interior environment (5a).
- Understand the relationship between the designed environments and human experience, wellbeing, behavior, and performance (7b).
- Be aware of the environmental impact of illumination strategies and decisions (12a).
- Understand the principles of natural and artificial lighting design, and strategies for using and modulating natural light (12b-12c).
- Select and apply products and materials on the basis of their properties and performance criteria, including ergonomics, environmental attributes, and life safety (13e).
- Understand that design decisions relating to acoustics, thermal comfort, and indoor air quality impact human well-being and the environment (14a).
- Understand the principles of acoustical design, and appropriate strategies for acoustical control (14b-14c).
- Understand the principles of thermal design, and how active and passive thermal systems and components impact interior design solutions (14d-14e).
- Understand the principles and strategies for plumbing, and strategies for waste management (14f-14g).
- Understand the principles of indoor air quality, and how the selection and application of products and systems impact indoor air quality (14h-14i).
- Demonstrate 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) (15e).
- Demonstrate understanding that design solutions affect and are impacted by building controls systems (15f).

- Demonstrate understanding that design solutions affect and are impacted by vertical and horizontal systems of transport and circulation such as stairs, elevators, and escalators (15g).
- Have awareness of the origins and intent of laws, codes, and standards (16a).
- Demonstrate understanding of standards and guidelines related to sustainability and wellness (16b).
- Demonstrate understanding of sector-specific regulations and guidelines related to construction, products, and materials (16c).
- Demonstrate understanding of detection such as active devices that alert occupants including smoke/heat and alarm systems (16d).
- Demonstrate understanding of compartmentalization such as fire separation and smoke containment (16e).
- Demonstrate understanding of suppression such as devices used to extinguish flames including sprinklers, standpipes, fire hose cabinets, extinguishers, etc. (16f).

COURSE ORGANIZATION

Course format will include lectures, readings from textbook, class exercises, field work and observational assignments, and exams. Note the due date of assignments and be sure to complete by deadlines!

Required Texts



Binggeli, Corky (2016). *Building Systems for Interior Designers*, 3rd Ed, John Wiley & Sons. ISBN-13: 978-1118925546

The text is fully available online through the Canvas course link to ARES, at the UF Smathers Libraries. (Be sure you have a VPN set up first: <https://ufl.instructure.com/courses/441612/files/?preview=61533836>). Go to Course Reserves tab and follow the link. <https://ufl.instructure.com/courses/441612/files/?preview=61533840>

Recommended Texts

- Ballast, D. (2013). *Interior Construction and Detailing for Designers and Architects*, 6th edition. Professional Publications, Incorporated. ISBN: 978-1591264200.
- Kennon, K.E. & Harmon, S.K. (2018). *The Coded Guidebook for Interiors*. 7th edition. John Wiley & Sons.

Canvas e-learning, additional recommended texts & materials

Course information, support materials, and grades are accessed on the course web page in the UF CANVAS e-learning system. <https://elearning.ufl.edu/>. From there you can log in to your student CANVAS dashboard. Class communications will be sent via Canvas, it is the student's responsibility to check the system daily and/or set appropriate notification reminders. Any technical problems should be directed to UF Computer Help, <https://lss.at.ufl.edu/help.shtml>

Materials & Supply Fees: None

COURSE EVALUATION

Exams (2)	40%
Class Project + Report	40%
<u>Assignments/Attendance</u>	<u>20%</u>
Final Grade	100%

Grading Scale

A = 93 – 100%	C = 73 – 76%
A- = 90 – 92%	C- = 70 – 72%
B+ = 87 – 89%	D+ = 67 – 69%
B = 83 – 86%	D = 63 – 66%
B- = 80 – 82%	D- = 60 – 62%
C+ = 77 – 79%	E < 60%

For further information on UF's Grading Policy, see: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Each assignment/exercise/homework- complete or incomplete - must be turned in on the due date and will be graded as they stand. Students who seek an alternative to this rule must attain permission from instructor prior to the due date. The projects will be evaluated based on what is turned in at that time. No unexcused late project will be accepted. The late project will be given a failing grade.

Work Products

All work produced in class is property of the University of Florida Department of Interior Design. Instructors may elect to keep samples of student work for CIDA accreditation purposes. *Students are advised to document work before collection.*

Course Technology

Access to and on-going use of a computer is required for all students. Course work will require use of a computer and a broadband connection to the Internet. In addition, students are required to have speakers and a webcam for some videoed assignments. For technology related issues the UF computing help desk can be reached at:

- <http://helpdesk.ufl.edu>
- (352) 392-HELP - select option 2

COURSE POLICIES

Attendance Policy

***You are expected to stay home if you are sick or show any symptoms of being sick. Any absence related to illness or other symptoms will be excused; however, email the instructor before missing any class.**

Three or more unexcused absences will result in the lowering of a student's final course grade. Final course grades will be lowered a letter-grade starting with the third unexcused absence. Requirements for class attendance and make-up exams, assignments, and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Students must also:

- Attend class on time and have materials & tools, and work at each class period.
- Participate in class discussions related to the assigned readings.
- Complete assignments, and work on exercises/homework in/outside of class time.
- Require the use of inclusive language, methods, and materials to respect diversity in viewpoints expressed by others.

Late Assignments

All assignments—complete or incomplete—must be turned in on the due date and will be graded as they stand. If a student's work is incomplete, the professors have the right to cancel that student's presentation to the design jury. Students who seek an alternative to this rule must attain written permission from instructors prior to the due date. The projects will be evaluated based on what is turned in at that time. **NO UNEXCUSED LATE WORK WILL BE ACCEPTED.**

Make-up Policy

Students who can demonstrate that they were unable to submit an assignment by the deadline due to an excused absence and who can provide enough appropriate documentation for the absence will be given a reasonable period of time to make up the late work. Any requests for make-ups due to technical issues **MUST** be accompanied by the ticket number received from the Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Incomplete Grades

The criteria by which a student may receive an incomplete grade (I*) are described at <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html#incomplete>

Please note that the instructor is not required to assign incomplete grades. It is at the instructor's discretion as to the extenuating circumstances that may warrant adequate excuse for not completing required course work.

Honor Code

All University of Florida students are expected to comply in full to the University of Florida Student Honor Code. This honor code details academic honesty expectations at the University of Florida. It is essential all students review this policy to understand the scope of these standards as well as the magnitude of infractions. It is each student's responsibility to read, understand, and follow these guidelines. All assessments (tests, quizzes, final exams, etc.), design studio projects, and any other assignments in UF's Interior Design Department are subject to Honor Code policy. Consequently, all instructors will strictly enforce the UF Honor Code in studio and classroom settings, which is the University of Florida's expectation as well as reflecting the profession of interior design's ethical standards. To review the honor code, visit: <http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php>.

Special Honor Code Issues for Interior Design Students

It is common in design related fields to take inspiration from various sources. While we encourage inspiration from any source it is the responsibility of the student to always maintain a clear delineation between inspirations from **OTHER SOURCES** and **YOUR AUTHENTIC** work. This applies both to in process-work as well as final classroom deliverables. Any violations of this policy will be considered plagiarism.

UF POLICIES

University Policy on Accommodating Students with Disabilities

"Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester."

University Policy on Academic Conduct

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Class Demeanor or Netiquette

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. Students must be respectful to one another, even when there are differing opinions. UF netiquette guidelines can be found at: [Netiquette Guide for Online Courses](#). Consequences might negatively affect an assignment grade, or for very severe cases, a report to the university administration.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Getting Help

For issues with technical difficulties for Canvas, please contact the UF Help Desk at:

- (352) 392-HELP - select option 2 or Canvas help at <https://lss.at.ufl.edu/help.shtml>

The ticket number received from LSS when the problem was reported to them MUST accompany any requests for make-ups due to technical issues. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Should you have any complaints with your experience in this course please visit <http://www.distance.ufl.edu/student-complaints> to submit a complaint.

CAMPUS RESOURCES

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).

University Police Department: [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road,

Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).

Academic Resources

E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: [Visit the Student Honor Code and Student Conduct Code webpage](#) for more information.

On-Line Students Complaints: [View the Distance Learning Student Complaint Process](#).

IND 3468 Interior Environmental Technologies

Fall 2022 COURSE SCHEDULE

Class Meeting Time: Tuesdays/Thursdays

Periods 2 - 3 (9:00am – 10:25am)

WK	Date	Topics/Activities	Reading	Assignments
01	8/25	Introductions & Course Overview		Due: Sunday, 8/28 11:55pm A1 (Student Profile) + A2 (Survey)
02	8/30	Environmental Conditions + the Site	Ch 1	
	9/01	Sustainable Design (LEED GA)	Ch 2	<i>Introduce A3: Sustainable Design</i>
03	9/06	Design for Human Health + Safety	Ch 3	
	9/08	Work on Assignment 3	Chs 1/ 2/ 3	
04	9/13	Sustainable Design: Teams present Assignment 3		Due: Assignment 3
	9/15	Thermal Comfort	Ch 12	Introduce Project: Field Work
05	9/20	Indoor Air Quality	Ch 13	
	9/22	Heating + Cooling Systems	Ch 14	
06	9/27	Daylighting & Sustainability	Ch 17	
	9/29	Electrical System Basics	Ch 15	Due: RE 1
07	10/04	Electrical Distribution	Ch 16	
	10/06	Communication Systems	Ch 20	Due: RE 2
08	10/11	Exam Review	Chs. 16/20	
	10/13	EXAM #1		
09	10/18	Water + Waste Systems	Chs. 9/10	
	10/20	Plumbing Fixtures + Appliances	Chs. 10/11	Due: RE 3
10	10/25	Code check list-Plumbing Fixtures		
	10/27	Fire Protection + Life Safety	Ch 18	Due: RE 4
11	11/01	Fire Protection + Life Safety	Ch 18	<i>Introduce A4: Fire Safety</i>
	11/03	Code Checklist for Fire Safety	Ch 18	
12	11/08	Conveyance Systems	Ch 19	
	11/10	Work on Assignment 4		Due: Assignment 4
13	11/15	Acoustics 1	Ch 7	
	11/17	Acoustics 2	Ch 8	
14	11/22	Acoustics Review	Chs 7/8	
	11/24	No class (Thanksgiving)		
15	11/29	Exam Review	Chs 7/8	
	12/01	FINAL EXAM		
16	12/06	Final Day of Class: Wrap/Make-up Day		

Note: The instructor reserves the right to make changes in the course schedule and syllabus as required to facilitate learning. Adjustments will be made when necessary and according to the professional judgment of the instructor. Be sure to check Canvas regularly for updates!