IND 3431 INTERIOR LIGHTING

Department of Interior Design
College of Design, Construction and Planning
University of Florida
Spring 2021

3 credits
Location: online & ARCH 310 & 312
Meeting times: M/W Period 9-10(4:05pm – 6:00pm)
Website: http://elearning.ufl.edu

INSTRUCTORS

- Dr. Nam-Kyu Park   E-mail: npark@ufl.edu   Phone: 352 294 1437   Office: Arch 354
  Office Hours: M/W 11:30am – 12:30pm (or by appointment)
  Zoom link: https://ufl.zoom.us/j/9876532945

- Xu Jin   E-mail: xjin1011@ufl.edu   Office: Arch 348
  Office Hours: M/W 11:30am – 12:30pm (or by appointment)

COURSE DESCRIPTION

Introduction to lighting design based upon critical awareness of the luminous environment, and principles and perception of light. Graphic exercises in lighting design and lighting calculations based on student design solutions.

COURSE GOALS & OBJECTIVES

As a result of this course the student will:

- Demonstrate understanding of the concepts, principles, and theories of sustainability as they pertain to building methods, materials, systems, and occupants. (CIDA standard 2a)

- Identify and define relevant aspects of a design problem (goals, objectives, performance criteria). (CIDA standard 4a)

- Gather appropriate and necessary information and research findings to solve the problem (evidence-based design). (CIDA standard 4b)

- Evaluate, select, and apply information and research findings to design. (CIDA standard 4c)

- Synthesize information and generate multiple concepts and/or multiple design responses to programmatic requirements. (CIDA standard 4d)

- Have awareness of team work structures and dynamics. (CIDA standard 5a)

- Use sketches as a design and communication tool (ideation drawings). (CIDA standard 6c)

- Produce competent presentation drawings across a range of appropriate media. (CIDA standard 6d)

- Effectively apply the elements, principles, and theories of design to two & three-dimensional design solutions. (CIDA standards 9a, b)

- Demonstrate understanding of color principles, theories, and systems. (CIDA standard 10a)

- Demonstrate understanding of the interaction of light and color and the impact they have on one another and interior environments. (CIDA standard 10b)

- Understand the principles of natural and electrical lighting design. (CIDA standard 12a)

- Competently select and apply luminaires and light sources. (CIDA standard 12b)

- Read and interpret construction drawings and documents. (CIDA standard 13g)

- Have awareness of sustainability guidelines. (CIDA standard 14a)

- Demonstrate understanding of laws, codes, standards, and guidelines that impact fire and life safety, including movement: access to the means of egress including stairwells, corridors, exit-ways. (CIDA standard 14d)

- Select and apply appropriate federal, state/provincial, and local codes; standards; accessibility guidelines. (CIDA standards 14g, h,i)

COURSE ORGANIZATION

Instructional activities will include lectures, class discussions, readings, lab exercises, exams, and assignments that relate to your class projects and lectures. It is important that you are prepared to contribute to discussions related to the assigned readings. The course will involve a series of exercises and projects and will relate to the lecture series.

Required Text: Jason Livingston (2014). *Designing With Light: The Art, Science and Practice of Architectural Lighting Design*. New York: John Wiley & Sons

Required Software & Materials:
Students are required to obtain and install the following software on their personal computer:
- Rendering and Lighting Software to be determined and announced.
- Likely 3dsmax 2020, Revit 2020, Enscape, possibly Corona renderer for 3dsmax (plan $28 just in case)
- Misc. paper, cardboards, and modeling supplies as needed for projects
- Access to a digital camera

Recommended Texts:
- The Lighting Handbook: Reference and Application (IESNA Lighting Handbook). 10th ed.
- Gary Gordon (2015). *Interior Lighting for Designers*. 5th ed. New York: John Wiley & Sons
- Mark Karlen, James Benya, & Christian Spangler (2017). *Lighting Design Basics*. 3rd ed. New York: John Wiley & Sons
- Sage Russell (2012). *The Architecture of Light*. 2nd ed. Conceptnine
- Gary Steffy (2008). *Architectural Lighting Design*, 3rd ed. New York: John Wiley & Sons
- Susan Winchip (2017). *Fundamentals of Lighting*. 3rd ed. New York: Fairchild Publications

Materials & Supply Fees:
Note that this spring 2021, students are not paying any Materials & Supply Fees or Equipment Fees.

Course Communications:
Class resources, announcements, updates, and assignments will be made available through Canvas. The preferred method of communication in this course is email. If you have any questions before the next class meeting, send it to both instructors via Canvas message or ufl email. Include course # in the email subject line. To meet the instructors during their office hours, you will need to schedule a specific time through e-mail.

COURSE GRADES

Midterm Exam	20%
Final Exam	20%
Exercises	15%
Projects	45%
Total =	100%

The **Midterm Exam** will cover lecture material, reading assignments, and information gleaned from the class assignments and exercises. **Final exam** will assess information from the entire semester.

Each assignment, exercise, and project - 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
Three or more unexcused absences will result in the lowering of a student's final course grade. Final 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 daily assignments, work on exercises/projects outside of class time
- Maintain a professional and respectful climate during zoom meetings and team work. We expect students to be engaged with their zoom camera on while **maintaining professionalism** (e.g. Turn always Video On at each class period; Sit properly at a computer).

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. LATE PROJECTS WILL BE GIVEN A FAILING GRADE.**

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.

COVID-19 Policies & Procedures
We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

❖ If you are registered for an online section, you are not permitted to use the physical studio spaces.
❖ If you are registered for the face-to-face section, see the following:

▪ You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
▪ This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
▪ Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
▪ Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.

- If you are experiencing COVID-19 symptoms (Click here for guidance from the CDC on symptoms of coronavirus), please use the UF Health screening system and follow the instructions on whether you are able to attend class. Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.

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.

Class Recording: Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Online course evaluation:
Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semesters, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results.

Getting Help
For issues with technical difficulties for Canvas, please contact the UF Help Desk at:
- http://helpdesk.ufl.edu
- (352) 392-HELP (4357)
- Walk-in: HUB 132 (contact them in advance)

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 3431 - PROPOSED CLASS SCHEDULE

Week	Date	Lecture	Reading	Assignments/Exercises/Projects
Week 01	1/11	Introduction		
	1/13	Designing with Light	Ch 1 (p1-6) Ch 2 (p.7-35)	
Week 02	1/18	**No class** (Martin Luther King Day)		
	1/20	The Science of Light & Vision	Ch 3 (p.37-45) Ch 4 (p.47-56)	
Week 03	1/25	<u>Light sources</u> Filament Sources	Ch 7 (p. 79-108)	Exercise 1: Lamp designation
	1/27	<u>Light sources</u> Discharge Sources	Ch 7 (p. 79-108)	Exercise 2: Lamp identification
Week 04	2/01	<u>Light sources</u> Solid State Sources	Ch 7 (p. 79-108)	Exercise 3: Lamp comparison
	2/03	Light, Color, & Materiality	Ch 4 (p.51-56) Ch 8 (p. 109-140)	**Project 1 assigned**: Color & Light
Week 05	2/08	<u>Quantity of Light</u> Measurement & Terms	Ch 6 (p. 67-78) Ch 13 (p.245-247)	Exercise 4: IESNA illumination

	2/10	<u>Lighting Systems & Fixtures</u>
		   Luminaire Components
		   Luminaire Types
			Ch 9 (p.141-166)	

Week 06	2/15	<u>Lighting Systems & Fixtures</u> Mounting Conditions	Ch 9 (p.141-166)	**Due**: **Project 1** **Project 2 assigned**: Luminaire

	2/17	<u>Lighting control systems</u>
		   Need for Controls
		   Types of Controls
			Ch 12 (p.225-243)
			Ch 6 (p.67-78)	

Week 07	2/22	<u>Lighting Systems & Fixtures</u>
		   Reading Manufacturer's
		   Literature
			Ch 9 (p.141-166)	Exercise 5: Reading luminaries

	2/24	Midterm Review		
Week 08	3/01	**Mid-Term Exam**		
	3/03	Designing with Light	Ch 2 (p.7-35) Ch 3 (p.37-45) Ch 5 (p.57-66)	Exercise 6: Conceptual design

Week	Date	Lecture	Reading	Assignments/Exercises/Projects
Week 09	3/08	Documenting the Design	Ch 11 (p.179-223)	Exercise 7: Lighting Schedule **Due**: **Project 2**
	3/10	Photometrics & Calculations	Ch 13 (p.245-265)	**Project 3 assigned**: Designing with Light
Week 10	3/15	Photometrics & Calculations	Ch 13 (p.245-265)	
	3/17	Building & Energy Codes: Sustainability: Health	Ch 14 (p. 265 - 271) Ch 15 (p. 273 - 279) Ch 16 (p. 281 - 285)	
Week 11	3/22	Project 2 Workshop Support		
	3/24	Project 2 Workshop Support		
Week 12	3/29	Project 3 Workshop Support		**Due: Project 3** **Project 4 assigned**: Full Lighting Design
	3/31	Project 3 Workshop Support **Exam Review**		
Week 13	4/05	**Final Exam**		
	4/07	Project 3 Workshop Support		
Week 14	4/12	Project 3 Workshop Support		
	4/14	Project 3 Workshop Support		
Week 15	4/19	Project 3 Workshop Support		
	4/21	**Final Project: Classes End**		**Due: Project 4 (Full Lighting Design)**