



## IND 3431 INTERIOR LIGHTING

Department of Interior Design  
College of Design, Construction and Planning  
University of Florida  
Spring 2022  
**3 credits**

Meeting place: RNK 0215

Meeting times: M/W Period 7-8 (1:55pm – 3:50pm)

Website: <http://elearning.ufl.edu>

### INSTRUCTOR

Nam-Kyu Park, Ph.D.      E-mail: [npark@ufl.edu](mailto:npark@ufl.edu)      Phone: 352 294 1437      Office: Arch 354

Office Hours: M/W 12:50pm – 1:50pm or by appointment

Zoom: <https://ufl.zoom.us/j/9876532945> ID: 987 653 2945

### 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.

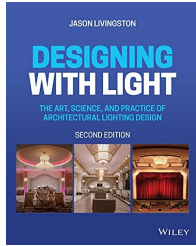
### COURSE GOALS & OBJECTIVES

As a result of this course the student will:

- Effectively apply the elements and principles of design and related theories to two & three-dimensional design solutions. (CIDA standards 11c, d)
- Have awareness of the environmental impact of illumination strategies and decisions. (CIDA standard 12a)
- Understand the principles of natural and artificial lighting design. (CIDA standard 12b)
- Understand strategies for using and modulating natural light. (CIDA standard 12c)
- Appropriately select and apply luminaires and light sources. (CIDA standard 12d)
- Understand how light and color impact health, safety, and wellbeing in the interior environment. (CIDA standard 12e)
- Demonstrate understanding of color in relation to materials, textures, light, and form (CIDA standard 12i)
- Have awareness of the origins and intent of laws, codes, standards. (CIDA standard 16a)

### COURSE ORGANIZATION

Instructional activities will include lectures, readings, class exercises and discussions, exams, and assignments that relate to the class projects and lectures. It is important that students 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 (2021). *Designing With Light: The Art, Science and Practice of Architectural Lighting Design*, 2<sup>nd</sup> ed. 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 Revit 2020, Enscape
- Access to a digital camera

**Recommended Texts:**

- The Lighting Handbook: Reference and Application (IESNA Lighting Handbook). 10<sup>th</sup> 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 (2022). *Fundamentals of Lighting*. 4th ed. New York: Fairchild Publications

**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 (npark@ufl.edu). Include course # in the email subject line. To meet the instructor during her office hours, you will need to schedule a specific time through e-mail.

**COURSE GRADES**

|                             |            |
|-----------------------------|------------|
| Midterm Exam                | 20%        |
| Final Exam                  | 20%        |
| Projects                    | 40%        |
| <u>Exercises/Attendance</u> | <u>20%</u> |
| Total =                     | 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: <http://www.isis.ufl.edu/minusgrades.html>

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 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 projects outside of class time
- Maintain a professional and respectful climate during zoom meetings and team work.

### **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.

## **UNIVERSITY 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](http://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](mailto: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](#).

## IND 3431 - PROPOSED CLASS SCHEDULE

| Week    | Date | Lecture   | Reading                              | Assignments/Exercises/Projects                         |
|---------|------|---|--------------------------------------|--|
| Week 01 | 1/09 | Introduction  |                                      |  |
|         | 1/11 | Designing with Light  | Ch 1 (p1-6)<br>Ch 2 (p.7-35)         |  |
| Week 02 | 1/16 | <b>No class (Martin Luther King, Jr. Day)</b>                                     |                                      |  |
|         | 1/18 | The Science of Light & Vision   | Ch 3 (p.37-45)<br>Ch 4 (p.47-56)     |  |
| Week 03 | 1/23 | <u>Light sources</u><br>Filament Sources  | Ch 7 (p. 79-108)                     | Exercise 1: Lamp identification & designation A        |
|         | 1/25 | <u>Light sources</u><br>Discharge Sources   | Ch 7 (p. 79-108)                     | Exercise 2: Lamp identification & designation B        |
| Week 04 | 1/30 | <u>Light sources</u><br>Solid State Sources                                       | Ch 7 (p. 79-108)                     | Exercise 3: Lamp comparison                            |
|         | 2/01 | Light, Color, & Materiality   | Ch 4 (p.51-56)<br>Ch 8 (p. 109-140)  | <b>Project 1 assigned:</b> Color, Light, & Materiality |
| Week 05 | 2/06 | <b>Dalylighting</b>   |                                      |  |
|         | 2/08 | <u>Lighting Systems &amp; Fixtures</u><br>Luminaire Components<br>Luminaire Types | Ch 9 (p.141-166)                     |  |
| Week 06 | 2/13 | <u>Lighting Systems &amp; Fixtures</u><br>Mounting Conditions                     | Ch 9 (p.141-166)                     | <b>Project 2 assigned:</b> Photographic Lighting       |
|         | 2/15 | Measurement & Terms (1)   | Ch 6 (p. 67-78)<br>Ch 13 (p.245-247) | <b>Due: Project 1</b>                                  |
| Week 07 | 2/20 | Measurement & Terms (2)   | Ch 6 (p. 67-78)<br>Ch 13 (p.245-247) | Exercise 4: IES illumination                           |
|         | 2/22 | Lighting Design<br>Distribution of Light  | Ch 6 (p. 67-78)                      |  |
| Week 08 | 2/27 | <b>Atlanta Field Trip</b>   |                                      |  |
|         | 3/01 |   |                                      |  |
| Week 09 | 3/06 | Lighting control systems<br><b>Mid-Term Review</b>                                | Ch 12 (p.225-243)<br>Ch 6 (p.67-78)  |  |
|         | 3/08 | <b>Mid-Term Exam</b>  |                                      | <b>Due: Project 2</b>                                  |

| Week    | Date | Lecture   | Reading   | Assignments/Exercises/Projects   |
|---------|------|---|---|--|
| Week 10 | 3/13 | <b>SPRING BREAK</b>   |   |  |
|         | 3/15 |   |   |  |
| Week 11 | 3/20 | Psychology of Light   | Ch 2 (p.7-35)<br>Ch 3 (p.37-45)<br>Ch 5 (p.57-66) | <b>Project 3 assigned:</b> Light up my Meeting Room                      |
|         | 3/22 | Documenting the Design  | Ch 11 (p.179-223)                                 |  |
| Week 12 | 3/27 | Photometrics & Calculations   | Ch 13 (p.245-265)                                 |  |
|         | 3/29 | <u>Lighting Systems &amp; Fixtures</u><br>Reading Manufacturer's Literature | Ch 9 (p.141-166)                                  |  |
| Week 13 | 4/03 | <u>Lighting Systems &amp; Fixtures</u><br>Reading Manufacturer's Literature | Ch 9 (p.141-166)                                  | Exercise 5: Reading luminaries   |
|         | 4/05 | Project 3 Workshop Support  |   |  |
| Week 14 | 4/10 | <b>Exam Review</b>  |   | <b>Due: Project 3</b><br><b>Project 4 assigned:</b> Full Lighting Design |
|         | 4/12 | <b>Final Exam</b>   |   |  |
| Week 15 | 4/17 | Project 4 Workshop Support  |   |  |
|         | 4/19 | Project 4 Workshop Support  |   |  |
| Week 16 | 4/24 | Project 4 Workshop Support  |   |  |
|         | 4/26 | <b>Classes End</b>  |   | <b>Due: Project 4 (Full Lighting Design)</b>                             |

*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!*