

Class Session: MW 6:30-8:40p L116 **Room:** D102

Course Goals

INDES 391 relates lighting design fundamentals to the study and practice of interior design. Topics include: lighting concept development, history of light, physics and perception of light, layering light, daylighting, lamps, luminaires, photometrics, lighting calculations, directing & controlling light, lighting graphics & submittals (RCPs, lighting plans, cut sheets & schedules), residential and non-residential lighting design basics, energy conservation and energy codes. The class format includes assigned reading, illustrated lectures, projects and exams.

Outcomes for INDES 391 Lighting for Interiors

Upon completion of the course, the student will be able to:

- Analyze and compare the characteristics, advantages, and disadvantages of natural and various artificial light sources and lighting techniques.
- Explain and present advantages and disadvantages of various types of artificial light source
- Explain how size and watts are expressed in the various types of artificial light sources and compare various light technologies based on efficiency
- Debate the efficacies of the various types of artificial light sources based on the specific application and context
- Compare the life expectancy of the various types of artificial sources
- Present and properly apply knowledge of the Color Rendering Index, and the Kelvin ratings of the various types of artificial sources
- Select from the various lighting luminaires for a specific design goal, and explain and justify selection process.
- Create a lighting design based on the specific application and constraints applying appropriate industry lighting standards and best practices
- Present and defend the lighting design you created to class members and industry experts, including concept, estimated costs, design trade-off analysis, and supporting technical documentation
- Complete lighting design projects incorporating industry standards, appropriate technologies and fundamental design principles (examples include: drafting a reflected ceiling plan, and designing and building a luminaire)
- Present and compare examples of how lighting design choices impact overall energy usage.

Required Textbooks

The Architecture of Light-2nd Edition. Sage Russell

Lighting Fundamentals 2nd Edition. Susan Winchip

Reading and Reference

Assigned readings on Canvas class site and online resources or articles

Materials

This course will primarily be taught from the required textbooks, with supplemental material added from alternate sources as needed. Exams will be based on material discussed in class, including: assigned reading, audio lectures and handouts. Fieldtrips will be included as available.

Digital Tools

This course relies on your having access to a computer, printer, scanner, and internet access.

Rendering software is one method of studying lighting. We will conduct some investigations using the SU Podium plugin and SketchUp models. These tools are available in the Interior Design labs. Self-study and lab time – or ability to use these tools at home – are required.

Instructor: Dan Beert Office Hours: Th Noon-3:00p F 1:00-3:00
Email anytime: dan.beert@bellevuecollege.edu

and by appointment or email
Phone: 425.564.4041

As needed:

- Drawing tools and supplies
- Color media: pencils, markers, etc.
- Portable digital storage: USB flash drive or portable hard drive

Optional/Recommended for class:

- Laptop computer – WiFi accessible
- SU Podium software and SketchUp

CLASS REQUIREMENTS

Online & in-class participation & interaction is expected.

Participation will count toward your grade.

Late assignments will only be accepted on approval of the instructor

Unless otherwise noted, ALL ASSIGNMENTS are due through electronic submittal to the Canvas course site by the specified due date & time. Some assignments will involve class presentations.

If you are experiencing an emergency situation that prevents you from turning in your work, it is your responsibility to notify me ASAP to make an alternate arrangement. Assignments are due.

PROFESSIONAL PRESENTATION & NEATNESS COUNT!

All work must be neat and organized with attention paid to workmanship and details. Messiness will result in lower scores.

It is your responsibility to let me know if you need extra help understanding a concept, assignment, or how to work with any course technology (Canvas, Podium, etc.).

Anyone struggling with this course should see me as soon as possible for extra help.

Communication

Please check Canvas for announcements a few times each week. Online discussions are part of the class.

Please email me directly, rather than submit email message via Canvas.

Evaluations

The instructor reserves the right to correct a student's grade to reflect any late work, missed classes, unprofessional behavior (including tardiness, leaving early, disrespect for others, poor preparation, sleeping in class, abusing studio etiquette). If any behavior might be cause for dismissal from a job, consider it cause for concern. All reasonable exceptions for absences or tardiness will be considered, but don't abuse this accommodation, either.

Grading will follow the BC Guidelines in the Course Catalog and Student Handbook. If you have questions about how you are doing in class, make an appointment to talk with me. Do not expect me to talk about this during or immediately after class.

Rather than assign points and average a cumulative total, assignments will be graded on a plus/minus grade scale. Assignment scores will be weighted according to workload, content, and importance. These scores will result in a final letter grade based on the scale below.

12-point plus/minus grading scale:

A+=12 A=11 A- =10 B+=9 B=8 B- =7 C+=6 C=5 C- =4 D+=3 D=2 D- =1 F=0

A = Excellent, Remarkable, Exceeds Potential

B = Very Good, High Quality, Promising

C = Passable, Developing Skills, Meets Minimum Expectations

D = Insufficient, Lacking, Poor

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 Email anytime: dan.beert@bellevuecollege.edu

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 Phone: 425.564.4041

COMPETENCY REQUIREMENT

You must earn a C- or better to pass this course and meet graduation standards.

WORK PRODUCT

The instructor reserves the right to refuse any project work that involves preliminary review, but has not been reviewed previously in class. If it has not been submitted for review at preliminary due dates, it may not be accepted for credit.

WORK RELEASE NOTICE

The instructor reserves the right to keep any materials for a reasonable period of time to grade, make duplicates, or otherwise document or archive the materials.

As a part of ongoing accreditation and program development, the Bellevue College Interior Design Department reserves the right to collect and keep student work. Faculty may retain selected student work in all courses within the Interior Design curriculum. It should be considered a great honor to have your work held to represent our program. Student work may include process work, project notebooks, and all finished projects from the beginning of the quarter through final projects. Students may make arrangements with instructors to have selected work photographed for their records. Projects will be returned on request for interviews.

Posting Course Documents

As needed, course info, course documents and/or additional course information will be posted to our Canvas class site.

Changes

The instructor reserves the right to make additions and/or corrections to the course content and the course syllabus as needed throughout the quarter. All changes will be posted & announced through our Canvas class site.

DIVISION POLICIES: <http://bellevuecollege.edu/artshum/policy.html>

Refer to the handout **Student Procedures and Expectations, Arts and Humanities Division** for additional information. With regard to **Academic Honesty**, note that for studio courses all work turned in for assessment **MUST** be performed by the individual.

SPECIAL NEEDS:

ME: I suffer from an "invisible" disability: hearing loss. Please speak slowly and clearly, projecting your voice to the front of the class. When you have something to say, please raise your hand so that I can see who is talking, and try to keep conversations to one person at a time. This condition fluctuates. Some days it is better than others.

YOU: If *you* require accommodation based on a documented disability, emergency medical information to share, or need special arrangements in case of emergency evacuation, please make an appointment with me as soon as possible.

If you would like to inquire about becoming a DRC student you may call 564-2498 or go in person to the DRC (Disability Resource Center) reception area in the Student Services Building.

Refer to the handout Student Procedures and Expectations, Arts and Humanities Division regarding eligibility for accommodation.

Writing Skills

If you need help with your writing skills, please make use of the Writing Lab in D-221 or call (425) 564-2493 for more information. Please go to them early, not the hour before your paper is due!