



## COURSE SYLLABUS

**COURSE:** LIGHTING SPECIFICATIONS 219

**INSTRUCTOR:** Rick Thompson, NCIDQ Certificate Number 27720

**Email:** [rtompson@idi.edu](mailto:rtompson@idi.edu)

**REQUIRED TEXT:** THE ARCHITECTURE OF LIGHT, Sage Russell, 2<sup>nd</sup> Edition, 2012

## COURSE DESCRIPTION AND OBJECTIVES

The Lighting Specifications course is designed to provide students with a working knowledge in the processes and requirements of creating lighting plans for residential and commercial interior applications. The student will communicate design concepts for a lighting project, and can be expected to have a working knowledge of the layout and design of a residential lighting plan and a commercial reflected ceiling plan.

Additionally, the student will produce design concepts for the layout and design of a residential electrical plan and commercial power and communication plan. The lighting specifications course is not designed to fulfill the position of an electrical engineer; rather, it is designed to prepare the designer to *work with* an electrical engineer in satisfying lighting needs for the client.

The course will present content through a variety of lectures, mixed media, guest speakers, field trips, and reading assignments.

## GRADING

### Quizzes

3 Multiple Choice / True or False Quizzes:

Quiz 1	5 points
Quiz 2	5 points
Quiz 3	5 points

### Residential Projects:

Project #1 Light Map	5 points
Project #2 Lighting Plan – Master & LR	5 points
Project #3 Lighting Plan – Kitchen & Bath	5 points
Project #4 Lighting Plan – Switches, etc.	5 points
Project #5 Electrical Plan	10 points

### Commercial Projects:

Project #6 Lighting Survey	10 points
Project #7 Lighting Calculations	5 points

Project #8 Power & Com Plan – sheet A3	5 points
Project #9 Reflected Ceiling Plan – sheet A4	10 points
Project #10 Elevations & Details – sheet A5	5 points
Project #11 Final Board & Presentation	20 points
Project #12 Specification Book	10 points
Attendance	10 points

**Total points possible: 120 points**

*Grading Scale:* A = 120 – 108, B = 107 - 96, C = 95 - 84, D = 83 – 72, F = >71

\* Minimum attendance required to pass class: 9 classes. At third absence, points for Attendance are lost.

### **MISSED QUIZZES**

As this course will be taken using the Canvas platform, all quizzes will be available online, so students may take them remotely if needed. Under extraordinary circumstances\*, a student may be allowed to take a quiz at a later date.

\* Instructor **MUST** be contacted prior to the absence to qualify for a quiz makeup. Acceptance of excuse is at the discretion of the instructor.

### **ASSIGNMENTS**

ALL WORK SUBMITTED FOR GRADING MUST BE YOUR OWN. This class does not have collaborative assignments, and it is not permitted for you to employ someone to do your work. No exceptions.

## Lighting Specification – Course Outline

### **Class 1:**

Review: Syllabus review. Course introduction. Set-up of students on Canvas.

Lecture: The Fundamentals of Light  
Reading: Chapters 2, 3, 5, 7 & 18 (Russell)

### **Class 2:**

Lecture: Luminaires, Architectural Features, and Playing with Light  
Lab: Creating a light map

Homework: Study for Quiz #1  
Complete Project #1 Light Map  
Reading: Chapters 4, 8, 9, 10 & 11 (Russell)

### **Class 3:**

#### **Quiz #1**

#### **Due: Project #1 - Light Map**

Lecture: Lighting symbols for residential lighting plans  
Homework: Begin work on Project #6 – Lighting Survey  
Reading: Chapters 21 & 22 (Russell)

### **Class 4:**

Lecture: Developing a Residential Lighting Plan for Bedrooms and Living Rooms  
Lab: Work on Project #2 Lighting Plan – Master & LR  
Homework: Complete Project #2 Lighting Plan – Master & LR  
Reading: Chapters 13, 26 & 27 (Russell)

### **Class 5:**

#### **Due: Project #2 Lighting Plan – Master & LR**

Lecture: Developing a Residential Lighting Plan for Kitchens and Baths  
Lab: Work on Project #3 Lighting Plan – Kitchen & Bath  
Homework: Complete Project #3 Lighting Plan – Kitchen & Bath

### **Class 6:**

#### **Due: Project #3 Lighting Plan – Kitchen & Bath**

Lecture: Adding switches, etc. to Residential Lighting Plan  
Lab: Work on Project #4 Lighting Plan – Switches, etc.  
Homework: Complete Project #4 Lighting Plan – Switches, etc.

**Class 7:**

**Quiz 2**

**Due:** **Project #4 Lighting Plan – Switches, etc.**

Lecture: Residential Electrical Plans

Lab: Project #5 Electrical Plan

Homework: Project #5 Electrical Plan

**Class 8:**

**Due:** **Project #5 Electrical Plan**

Lecture: Lighting for Commercial Spaces

Introduction to Power and Communication plans

Lab: Review Project #7 Lighting Calculations

Work on Project #8 Power & Com Plan – sheet A3

Review Project #11 – Final Board and Presentation

Review Project #12 – Specification Book

Homework: Complete Project #6 Lighting Survey

Complete Project #7 Lighting Calculations

Complete preliminary Project #8 Power & Com Plan – sheet A3

**Class 9:**

**Due:** **Project #6 Lighting Survey**

**Project #7 Lighting Calculations**

Preliminary Project #8 Power & Com Plan – sheet A3 for review

Lecture: Reflected Ceiling plans

**Guest Speaker:** **Armstrong\***

Lab: Work on Project #9 Reflected Ceiling Plan – sheet A4

Homework: Complete preliminary Project #9 Reflected Ceiling Plan – sheet A4

Begin work on Project #11 Final Board & Presentation

Begin work on Project #12 Specification Book

**Class 10:**

**Quiz #3**

**Due:** **Project #8 Power & Com Plan – sheet A3**

Preliminary Project #9 Reflected Ceiling Plan for review

Lecture: Emergency Lighting and Exit Signage

Elevations, Sections, and Details

Lab: Add emergency lighting and exit signage locations to Sheet A4

Work on Project #10 Elevations & Details – sheet A5

Homework: Complete Project #9 Reflected Ceiling Plan Sheet A4

Complete preliminary Project #10 Elevations & Details – sheet A5

**Class 11:**

**Due:** **Project #9 Reflected Ceiling Plan – Sheet A4**  
Preliminary Project #10 Elevations & Details – sheet A5 for review

**Lab:** Final Q&A for Projects #11 & 12  
Review of presentation techniques

**Class 12:**

**Due:** **Project #10 Elevations & Details – sheet A5**  
**Project #11 Final Board & Presentation**  
**Project #12 Specification Book**

\* Dates for field trips and guest speakers are tentative and subject to change due to scheduling conflicts, illnesses, or other circumstance.